Screening Site Inspection
Final Report

for

Henry Hoffman Landfill
ILD 984 791 657
April 1997

Prepared for
U.S. Environmental Protection Agency
Contract 68-W8-0064
Work Assignment 29-5JZZ

1.0 Introduction

On August 7, 1991, the Alternative Remedial Contracting Strategy (ARCS) contractor was authorized, by approval of the United States Environmental Protection Agency (USEPA) Region V work plan, to conduct a screening site inspection (SSI) of the Henry Hoffman Landfill site in Whiteside County, Illinois.

The site was initially placed on the Comprehensive Environmental Response, Compensation, and Liability Act Information System (CERCLIS) on August 28, 1990. This discovery action was the result of an unpermitted landfill receiving fill of a questionable nature.

The site received its initial Comprehensive Environmental Response, Compensation, and Liability Act evaluation in the form of a preliminary assessment (PA) report completed by the Illinois Environmental Protection Agency (IEPA) on September 9, 1991. The sampling portion of the SSI was conducted on August 24, 1993, when the ARCS contractor field team collected six soil samples, four groundwater samples, and four sediment samples.

The purposes of the SSI have been stated by USEPA in a directive outlining pre-remedial program strategies. The directive states:

> All sites will receive a screening SI to 1) collect additional data beyond the PA to enable a more refined preliminary HRS (Hazard Ranking System) score, 2) to establish priorities among sites most likely to qualify for the NPL (National Priorities List), and 3) to identify the most critical data requirements for the listing [expanded] SI step. A screening SI will not have rigorous data quality objectives (DQOs). Based on the refined preliminary HRS score and other technical judgement factors, the site will then either be designated as NFRAP (no further remedial action planned) or carried forward as an NPL listing candidate. A listing [expanded] SI will not automatically be done on these sites. First, they will go through a management evaluation to determine whether they can be addressed by another authority such as RCRA (Resource Conservation and Recovery Act).... Sites that are designated as NFRAP or deferred to other statutes are not candidates for a listing [expanded] SI.
>
> The listing [expanded] SI will address all data requirements of the revised HRS using field screening and NPL level DQOs. It may also provide needed data in a format to support remedial investigation work plan development. Only sites that appear to score high enough for listing and

that have not been deferred to a higher authority will receive a listing [expanded] SI (USEPA, 1988).

USEPA Region V requested the ARCS contractor to identify sites during the SSI that may require removal action to remediate an immediate human health or environmental threat.

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2.0 Site Background

2.1 Introduction

This section includes information obtained during the SSI and from reports of previous site activities.

2.2 Site Description

The Henry Hoffman Landfill (HHL) is located at the end of Anixter Road, west of Rock Falls, Illinois, approximately 1/4- mile north of U.S. Route 30. Figure 2-1 is a site location map and Figure 2-2 is a site sketch.

The site topography has a slight slope to the north. The northern edge of the site is a steep slope that levels off to a flat flood plain of the Rock River.

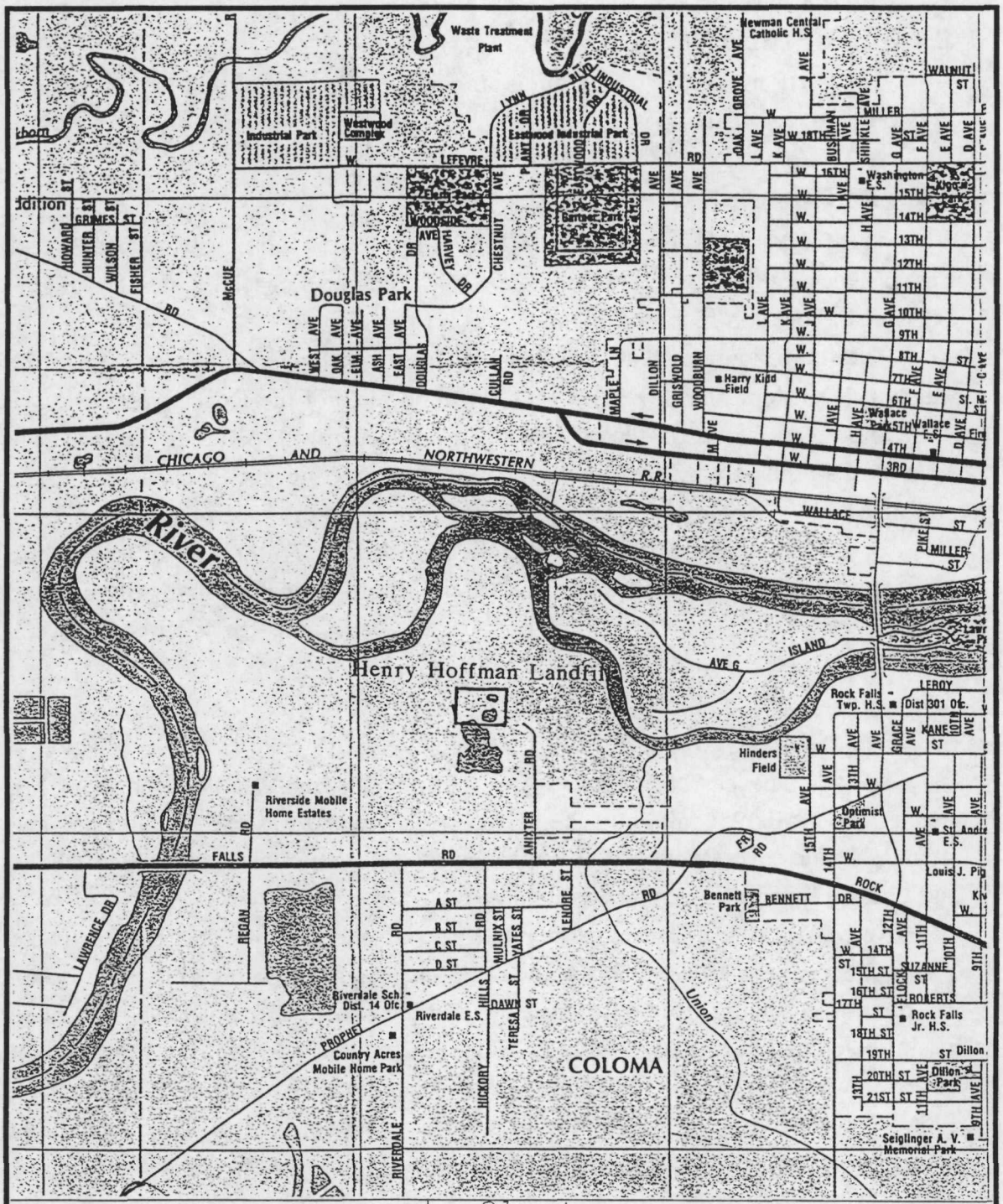
Site access is uncontrolled. Main site access is a gravel road that enters the site from the southeast. A cable gate is present across the gravel road at the site entrance; no other site security is present.

To the north and west of the site are farm fields. To the east of the site are Associated Asphalt Company (AAC), Anixter Manufacturing Company (AMC), and farm fields. To the south of the site is a 10 acre pond, Rock River Provision Company, and the Hoffman farmhouse.

2.3 Site History

In 1951, the current owner, Henry Hoffman, purchased the land from Mr. Bennett. Before 1951 and until the early 1970s, the land was used for farming and grazing. In the early 1970s, Mr. Hoffman leased a section of his land to Nelson Sand and Gravel, Prescott Construction, and AAC.

Nelson Sand and Gravel excavated three large gravel pits onsite. They were 1 acre, 3 acres, and 10 acres in size. At present, the 10 acre gravel pit is a stocked fish pond with fill along the northern edge and the two smaller pits have been filled in. In the early 1980s, Nelson Sand and Gravel Company and Prescott Construction closed down, leaving only AAC operating at the site. After that, Mr. Hoffman allowed local contractors to dispose of road construction and building demolition debris in the two smaller, unlined, waterfilled gravel pits. Drums of slaughterhouse wastes from Rock River Provision Co. and Hoffman's household wastes were also disposed in the gravel pits. Mr. Hoffman mentioned unauthorized dumping had occurred.



Source:
Spectrum 1988

Scale:
2.25 inches = 1 mile

N

Figure 2-1
Site Location Map

Henry Hoffman Landfill
Rock Falls, Illinois

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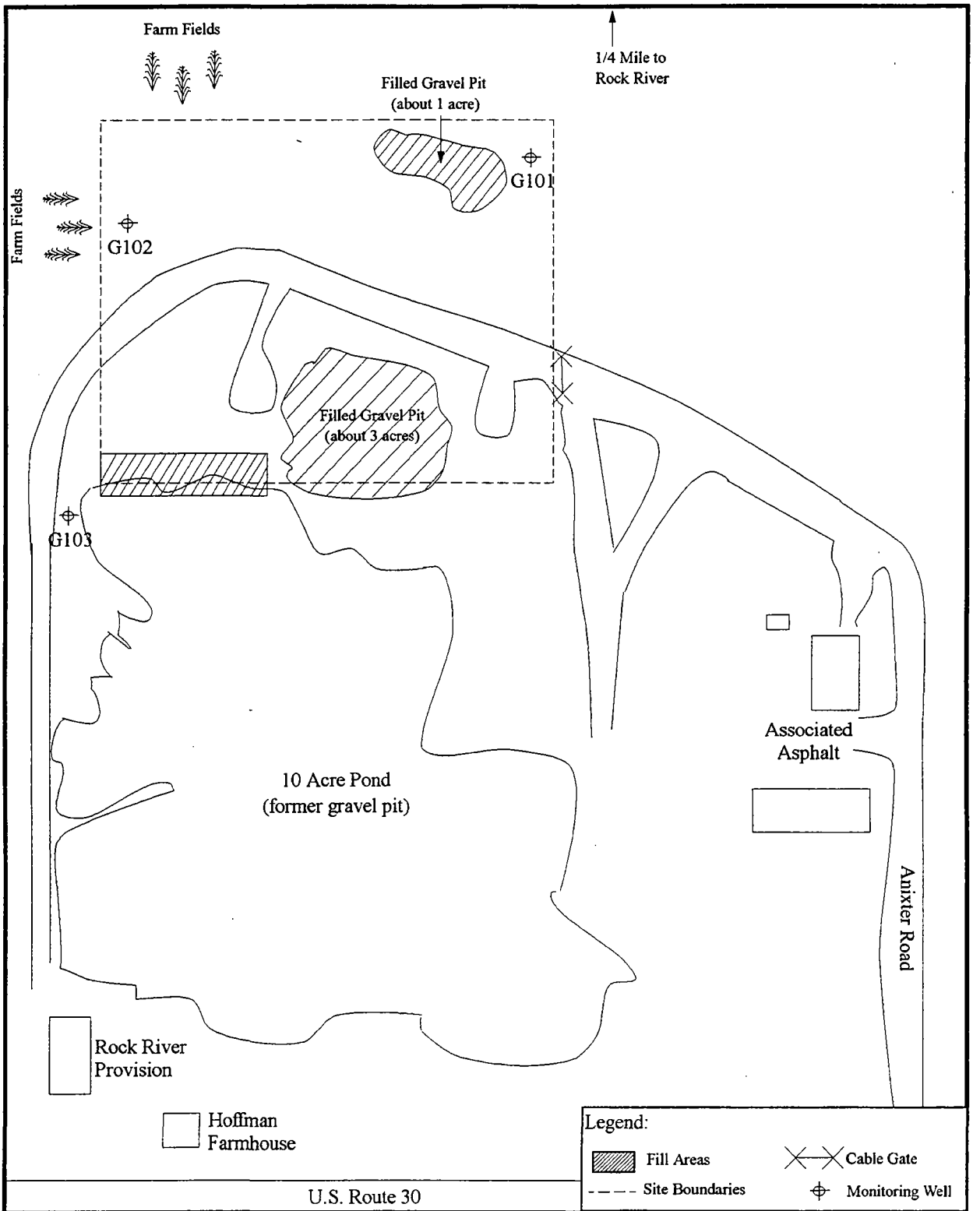


Source: IEPA 1991	N	Figure 2-2 Site Sketch
Scale: Not to Scale		Henry Hoffman Landfill Rock Falls, Illinois

FRE00091
9.22.94

On October 17, 1987, the IEPA conducted an investigation of HHL and observed Illinois Administrative Code violations including refuse dumped into standing water, no personnel or equipment onsite, no gates or fencing, open burning of wastes, and no indication of daily cover (IEPA 1991).

In August 1989, Willett Hoffman and Associates, Inc., installed groundwater monitoring wells onsite (IEPA 1991). Detailed analyses were performed for 1 year after well installation, and results indicated elevated levels of metals in downgradient wells (IEPA 1991). After 1 year, the IEPA approved a less rigorous analysis for the samples, using the following analytical parameters: alkalinity, organic carbon, chloride, sulfate, and residue on evaporation. In 1990 and 1991, analyses indicate a significant decrease in alkalinity, a significant decrease in residue on evaporation, and a significant increase in sulfate content in downgradient wells.

HHL ceased accepting clean fill on October 12, 1990 (IEPA 1991). As part of closure, the site was graded for proper drainage (IEPA 1991). On October 19, 1990, the landfill received its final cover, and the seeding was finished (IEPA 1991).

IEPA conducted a PA of HHL on August 13, 1991, and determined the HHL site had the potential to impact the environment and nearby populations (IEPA 1991). A medium priority rating for inspection was assigned to the site (IEPA 1991).

2.4 Applicability of Other Statutes

The HHL site is listed in the Illinois CERCLIS list (USEPA 1992a); it is not listed in the Illinois list of RCRA notifiers (USEPA 1992b).

3.0 Site Inspection Activities and Analytical Results

3.1 Introduction

This section outlines the procedures used and observations made during the SSI conducted at the HHL site. Sampling activities were conducted in accordance with the quality assurance project plan (QAPjP) dated September 27, 1991. Figures 3-1 and 3-2 show each sample location; Table 3-1 provides a summary of sample descriptions and locations.

Appendix B presents the USEPA Potential Hazardous Waste Site Inspection Report (Form 2070-13).

SSI samples were analyzed for organic and inorganic substances contained on the USEPA target compound list (TCL) and target analyte list (TAL) by USEPA Contract Laboratory Program participant laboratories. Appendix C presents the TCL and TAL. Appendix D presents a summary of all analytical data generated by SSI sampling. Appendix E contains photographs of the site and sample locations.

3.2 Site Reconnaissance

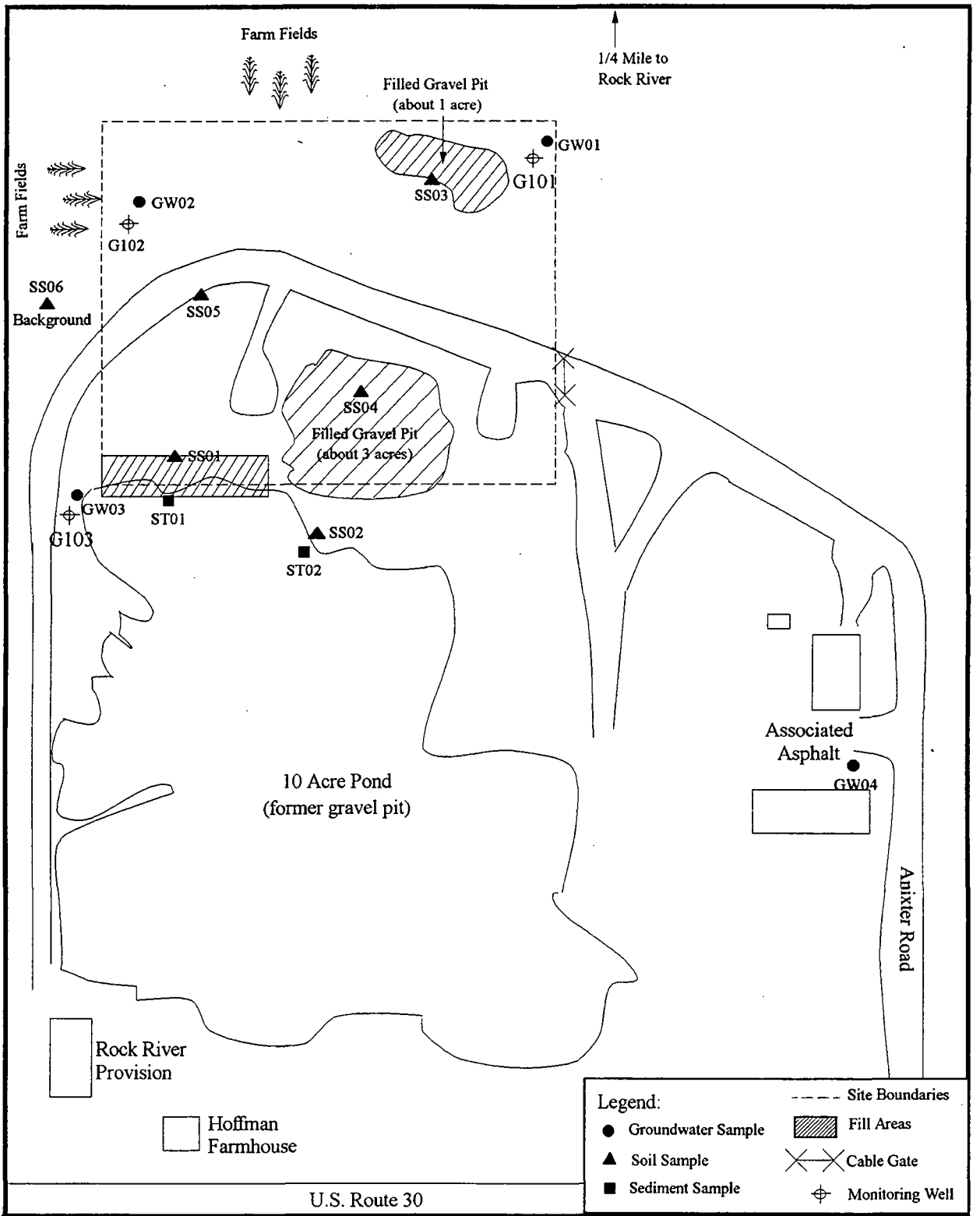
An SSI reconnaissance was conducted at the HHL site on May 25, 1993. It included a visual site inspection to determine the status and activities of the facility, health or safety hazards, and potential sampling locations.

3.3 Site Representative Interview

The reconnaissance team interviewed Mr. Henry Hoffman, site owner and operator. The team discussed the purpose of the SSI with Mr. Hoffman and gathered site-specific information.

3.4 Groundwater Sampling

On August 25, 1993, a field team collected four groundwater samples within 1/4 mile of the site. Three groundwater samples were collected from monitoring wells around the site. The monitoring wells are labeled G101, G102, and G103. Figure 3-1 presents approximate sample locations. Table 3-1 contains a description of each groundwater sample.



Source: IEPA 1991	N	Figure 3-1 Onsite Sample Location Map
Scale: Not to Scale		Henry Hoffman Landfill Rock Falls, Illinois

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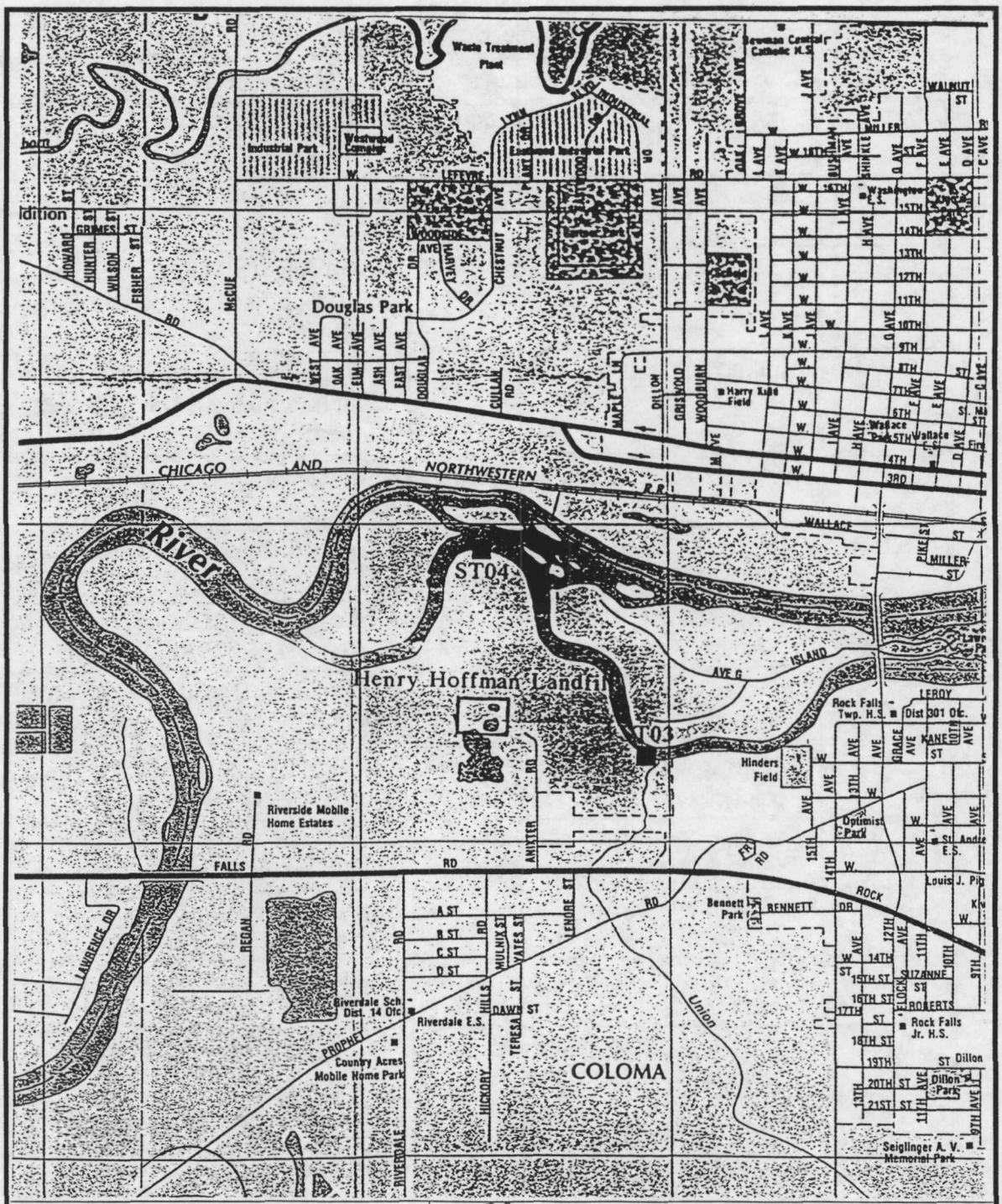

Source: Spectrum 1988	N	Figure 3-2 Offsite Sample Location Map
Scale: 2.25 inches = 1 mile		Henry Hoffman Landfill Rock Falls, Illinois

FRE00161

Table 3-1
Sample Descriptions

Sample	Depth	Appearance	Location
GW01	27.9 feet	Light brown, cloudy	Monitoring well G101, northeastern corner of the site.
GW02	24.5 feet	Clear	Monitoring well G102, northwestern corner of the site.
GW03	29.7 feet	Clear	Monitoring well G103, 100 feet south of the southwestern corner of the site.
GW04	unknown (sandpoint)	Clear	Sandpoint well for Associated Asphalt, approximately 475 feet southeast of the site.
ST01	Surface to 2 inches	Brown sand with some silt and gravel.	Northwestern corner of the onsite pond.
ST02	Surface to 2 inches	Brown sand with some silt and gravel.	North-central edge of the onsite pond.
ST03	Surface to 6 inches	Brown sand with some silt and gravel.	Approximately 1/2 mile upstream of the site on the Rock River.
ST04	Surface to 6 inches	Gray, silty clay.	Just north of the site on the Rock River.
SS01	2 to 6 inches	Brown silt with some gravel and sand.	Southwestern corner of the site.
SS02	2 to 6 inches	Brown silt with some sand and clay.	South-central edge of the site along bank of pond.
SS03	2 to 6 inches	Brown silt with some sand.	Northeastern area of the site, near 1-acre filled pit.
SS04	2 to 6 inches	Black to brown sandy silt.	Southeastern area of the site, near 3-acre filled pit.
SS05	2 to 6 inches	Brown silt with some sand and gravel.	West-central area of the site.
SS06	2 to 6 inches	Brown, silty clay with some sand and gravel.	Farm field bordering western edge of the site.

Samples were labeled GW01 through GW04. Sample GW01 was collected from monitoring well G101, which is in the northeastern corner of the site. G101 is 27.9 feet deep and screened in a sand and gravel aquifer. Sample GW02 was collected from monitoring well G102, which is a downgradient monitoring well in the northwestern site corner. The well is 24.5 feet deep and screened in a sand and gravel aquifer. Sample GW03 was collected from monitoring well G103, which is a downgradient monitoring well 100 feet south of southeastern site corner. The well is 29.7 feet deep and screened in a sand and gravel aquifer. Sample GW04 was collected offsite from the AAC well about 475 feet southeast of the site. GW04, a sandpoint well, is considered upgradient. Samples were placed in clean bottles using a submersible pump with teflon tubing. Sampling and analytical methodologies were in accordance with those outlined in the QAPjP, dated September 27, 1991. Appendix D presents analytical data.

Samples scheduled for organic analysis were shipped to Natex/Gulf South Environmental Labs in New Orleans, Louisiana, on August 27, 1993. Samples scheduled for inorganic analysis were shipped to SVL Analytical Inc. in Kellogg, Idaho, on August 30, 1993.

3.5 Sediment Sampling

On August 26, 1993, a field team collected four sediment samples within 1 mile of the site. Figure 3-1 presents approximate sample locations. Table 3-1 contains a description of each sediment sample.

Samples were labeled ST01 through ST04. Sample ST01 was collected from the northwestern corner of the onsite pond to establish a possible release to surface water. Sample ST02 was collected from the north-central edge of the onsite pond to establish a possible release to surface water. Sample ST03 was collected approximately 1/2 mile upstream of the site on the Rock River, near where Union Ditch enters the Rock River. This sample location was selected to represent background sediment conditions in the Rock River. Sample ST04 was collected from the Rock River, approximately 1/4 north of the HHL site. ST04 is expected to establish a possible release to surface water.

Sediment samples were collected with a clean, stainless steel hand auger and stainless steel spoons, and placed in clean sample jars. Sampling and analytical methodologies were in accordance with those outlined in the QAPjP, dated September 27, 1991. Appendix D presents analytical data.

Sediment samples scheduled for inorganic analysis were shipped to SVL Analytical Inc. in Kellogg, Idaho, on August 30, 1993. Sediment samples scheduled for organic analysis were shipped to Natex/Gulf South Environmental Labs in New Orleans, Louisiana, on August 27, 1993.

3.6 Soil Sampling

On August 24, 1993, a field team collected six soil samples onsite. Figure 3-1 presents approximate sample locations. Table 3-1 contains a description of each soil sample.

Samples were labeled SS01 through SS06. SS01 was collected from the bank of the onsite pond in the southwestern site corner to establish a soil exposure threat. Sample SS02 was collected from the south-central edge of the site along the bank of the 10 acre pond to establish a soil exposure threat. SS03 was collected from the northeastern site area near the 1 acre filled pit to establish a soil exposure threat, possibly attributable to past landfilling activities. SS04 was collected from the southeastern site area in the 3 acre filled pit area to establish a soil exposure threat, possibly attributable to past landfill activities. SS05 was collected from the west-central site area to establish a soil exposure threat, possibly attributable to past landfilling activities. SS06 was collected from the farm field bordering the western site edge to establish background conditions.

Soil samples scheduled for organic analysis were shipped on August 24, 1993, to Pacific Analytical, Carlsbad, California. Soil samples scheduled for inorganic analysis were shipped on August 24, 1993, to Americal Analytical & Technical Services, Baton Rouge, Louisiana.

3.7 Analytical Results

This section summarizes analytical results from SSI samples. Appendix C presents SSI analytical data. Analysis of samples from three monitoring wells and one commercial well indicates the presence of 7 inorganic analytes that meet key sample criteria. Analysis of four sediment samples indicates the presence of 8 organic compounds and 16 inorganic analytes that meet key sample criteria. Analysis of six soil samples indicates the presence of two organic compounds and two inorganic analytes that meet key sample criteria.

3.8 Key Samples

Key samples are those that contain substances in sufficient concentration to document an observed release. Table 3-2 identifies SSI key samples.

Table 3-2
Key Sample Summary

Groundwater (µg/L)

Substance	Sample Number			
	GW01	GW02	GW03	GW04 Background
Arsenic	38.4		7.4 B	1.0 U
Barium	241		146 B	41.2 B
Cobalt	15.8 B			6.0 U
Copper	14.4 B		7.3 B	4.0 U
Iron	50,600 J			78.4 JB
Manganese	5,940			672
Selenium		2.4 JBNW		1.0 UNJ

Table 3-2 (Continued) Key Sample Summary			
Sediments (mg/kg)			
Substance	Sample Number		
	ST02	ST03 Background	ST04
Phenanthrene	0.940	0.430 U	
Fluoranthene	0.950	0.080 J	
Benzo(a)Anthracene	0.460	0.044 J	
Chrysene	0.460	0.049 J	
Benzo(b)Fluoranthene	0.410	0.041 J	
Benzo(a)Pyrene	0.400	0.049 J	
Dieldrin		0.0043 U	0.0087 P
Endrin Aldehyde		0.0043 U	0.012 P
Aluminum	7,490	1,980	16,600
Arsenic		1.4 B	6.0 S
Barium	107	15.8 B	177
Beryllium	0.45 B	0.25 U	0.88 B
Cadmium		1.00 U	2.0
Chromium	33.5	6.1	27.7
Cobalt	8.0 B	2.0 B	10.7 B
Copper	14.8	4.4 B	26.4
Iron	13,000 *	3,920 *	21,600 *
Lead	38.1 S	7.0 S	30.5 S
Manganese	855 JN*	90.7 JN*	984 JN*
Nickel		6.0 B	22.2
Potassium		259 B	1,810
Silver		1.5 U	2.7 B
Vanadium	21.7	6.7 B	35.0
Zinc		21.4	121

Table 3-2 (Continued) Key Sample Summary						
Soil (mg/kg)						
Substance	Sample Number					
	SS01	SS02	SS03	SS04	SS05	SS06 Background
Acetone	0.015	0.020		0.017		0.012 U
Toluene					0.360 D	0.120
Calcium		18,900	16,200	12,100	69,600	3,520
Magnesium		11,100	9,890		40,700	3,000

Notes:

U Substance is undetected. The reported value is the contract required quantitation limit (CRQL) for organics or the contract required detection limit (CRDL) for inorganics.

J Reported value is estimated.

B Reported value less than the CRDL, but greater than the instrument detection limit.

N Spiked sample recovery not within control limits.

S Reported value determined by the Method of Standard Additions.

W Post-digestion spike for Furnace AA analysis is out of control limits; although sample absorbance is less than 50% of spike absorbance.

D Reanalyzed at a higher dilution factor.

* Duplicate analysis not within control limits.

P Greater than 25% difference for detected concentrations between the two GC columns.

4.0 Characterization of Sources

4.1 Introduction

Analyses of SSI samples identified one source at the HHL site: the landfill.

4.2 Waste Source: Landfill

4.2.1 Description

The HHL site is an inactive landfill that covers approximately 14 acres: 4 acres of completely filled in gravel pits and one 10-acre pond with fill along the northern shore (IEPA 1991).

The landfill does not have an engineered liner. Waste disposal operations began in the early 1980s. Clean fill and final cover material were in place by October 1990. The thickness of the final cover material and clean fill is unknown.

4.2.2 Waste Characteristics

Local contractors disposed of road construction and building demolition debris into the two smaller, unlined, water-filled, gravel pits. Drums of slaughterhouse wastes from Rock River Provision Co. and Hoffman's household wastes also were disposed in the two smaller gravel pits.

4.2.3 Potentially Affected Migration Pathways

The groundwater pathway may be affected by infiltrating precipitation transporting compounds from the fill material to the saturated portion of the surficial sand and gravel aquifer.

The surface water pathway may be affected by potentially contaminated groundwater discharging to the onsite pond and nearby Rock River.

4.3 Other Potential Sources Within One Mile

Immediately east of the site is Associated Asphalt Company (AAC). During the site reconnaissance, numerous drums and tanks were observed strewn about on AAC's leased property along HHL's eastern border. These observations were reported to the USEPA work assignment manager. On August 24, 1993, the Ecology and Environment, Inc., Technical Assistance Team (TAT) conducted a site assessment at AAC. Based on drum and tank locations and the similarity of drum and tank contents to AAC's raw materials and product, the TAT contractor orally

notified AAC during the site assessment to abate threats posed by the deteriorating tank and drums within 10 days. Appendix G contains the site assessment report prepared by the TAT contractor.

5.0 Discussion of Migration Pathways

5.1 Introduction

This section includes information useful in analyzing the potential impact of contaminants found at the HHL site on the four migration pathways: groundwater, surface water, air, and soil.

5.2 Groundwater

Four shallow sand and gravel wells were sampled during the SSI. One well was a production well for AAC southeast of the site; the other three were monitoring wells located on or near the HHL site. Sample analyses indicated the presence of 7 inorganic analytes that meet key sample criteria in the onsite monitoring wells.

Quaternary-age alluvium deposits underlie the site and consist of unconsolidated deposits of poorly sorted sand, silt, and clay containing local deposits of sandy gravel (Lineback 1979; IEPA 1991). Alluvial deposits vary in thickness between 10 and 130 feet (IEPA 1991). The groundwater flow direction within the sand and gravel aquifer is to the northwest, toward the Rock River (Willett Hofmann & Associates 1991).

Silurian-age dolomite lies directly beneath and interconnects with the alluvial deposits in the site area and most of Whiteside County. The Silurian dolomite varies in thickness from zero to an estimated 450 feet in Whiteside County (Foster 1956; Hackett and Bergstrom 1956; Willman 1967). The dolomite is light gray in color and generally abundant, with water-bearing cracks and joints (Foster 1956).

The Maquoketa shale lies directly below the Silurian dolomite in the site area and is generally 150 to 200 feet thick (Foster 1956; Hackett and Bergstrom 1956; Willman 1967). The shale layer is thought to act as an aquitard, preventing the downward migration of water from overlying units to deeper water-bearing units.

Lying beneath the Maquoketa shale is the Galena-Platteville dolomite; the average thickness is about 375 feet (Foster 1956; Willman 1967). Water is obtained from water-filled cracks and crevices, but water quality tends to be low because of high silt content within cracks and joints.

The city of Rock Falls has four municipal wells within 4 miles of the site. The city of Sterling has six municipal wells within 4 miles of the site (Table 5-1). In

Table 5-1
Public Water Supply Sources Within 4 Miles of HHL

Distance/ Direction from Site	Source Name	Location of Source	Approximate Population Served	Source Type and Depth
0.75 mile west	Riverside Estates Mobile Home Park	Sec. 30, T21N, R7E	3 wells serving 270 people	Silurian dolomite 100 to 185 feet
0.75 mile south	Country Acres Mobile Home Park	Sec. 31, T21N, R7E	1 well serving 88 people	Silurian dolomite 105 feet
1.75 miles southeast	Rock Falls Municipal	Sec. 33, T21N, R7E	2 wells serving 5,317 people	Sand and Gravel 70 to 80 feet
1.75 miles southeast	Rock Falls Municipal	Sec. 33, T21N, R7E	2 wells serving 5,317 people	Silurian dolomite 135 feet
1.5 miles north	Northern Illinois Water Corp.-- Sterling	Sec. 19, T21N, R7E	2 wells serving 5,234 people	Sand and Gravel 83 to 86 feet
3.2 miles northeast	Northern Illinois Water Corp.-- Sterling	Sec. 22, T21N, R7E	4 wells serving 10,468 people	Cambrian/ Ordovician Bedrock 1,400 to 1,800 feet

addition to these municipal wells, four mobile home park wells are within 4 miles of the site. The 14 municipal wells serve 26,694 people.

Outside the town limits, residents have their own drinking water wells; a total of 320 private wells exist within 4 miles of the site. Roughly one-third of the private wells obtain their water from the alluvial sands and gravels. The other two-thirds obtain their drinking water from the Silurian dolomite. Table 5-2 presents estimated populations using private wells within 4 miles of the HHL site. Private and municipal well locations were obtained from the Illinois State Water Survey's (ISWS) Private and Public-Industrial Commercial database (ISWS 1993). Well locations were plotted on U.S. Geological Survey (USGS) 7.5 minute topographic maps (USGS 1982a, 82b, 83, 85). Populations associated with each well were determined by counting houses, on USGS 7.5 minute topographic maps, outside municipal water boundaries and multiplying that number by the average number of persons per household, 2.6, for Whiteside County [U.S. Department of Commerce (USDC) 1990; USGS 1982a, 82b, 83, 85]. Tables 5-1 and 5-2 show an estimated 27,639 people use groundwater from water wells located within 4 miles of the site, including the municipal wells.

5.3 Surface Water

Four sediment samples were collected within 1 mile of the site during the SSI. Chemical analysis of the samples indicates the presence of 8 organic compounds and 16 inorganic analytes that meet key sample criteria. A potential for direct contact with affected sediments exists at the site and downgradient of the site. Site access is unrestricted. Organic and inorganic substances were detected in an onsite sediment sample (ST02). Inorganic substances were also detected in a sediment sample (ST04) taken from the Rock River, where groundwater to surface water discharge could potentially be taking place downstream of the site.

According to USGS topographic maps of the area and observations made during the SSI, site runoff flows either south into the pond along the southern border or northeast for approximately 1/2 mile to the Rock River. The 15-mile downstream limit terminates in the Rock River. The Rock River is not a drinking water source (IEPA 1983); however, the river is used for recreational purposes: fishing, boating, and parks. Within the 15-mile downstream limit on the Rock River, approximately 10 miles are considered wetlands [U.S. Department of the Interior (USDI) 1987a,

Table 5-2 Private Well Users	
Radial Distance from HHL in Miles	Approximate Population Served by Private Wells
0 - 1/4	3
1/4 - 1/2	8
1/2 - 1	26
1 - 2	117
2 - 3	173
3 - 4	618
Total Population	945

87b, 87c, 87d]. According to the National Heritage Database, there are no known occurrences of endangered and threatened species, Illinois Natural Area Inventory sites, or dedicated Illinois Nature Preserves within the termini of the 15-mile downstream limit [Illinois Department of Conservation (IDOC) 1994].

5.4 Soil

Six soil samples were collected during SSI field activities. 2 organic compounds and 2 inorganic analytes that meet key sample criteria were detected in soil samples.

No onsite population exists that may be affected by exposure to TCL compounds or TAL analytes. The population within a 1 mile radius of the site is about 538 persons. It was calculated by counting houses outside municipal boundaries on USGS topographic maps and multiplying this number by the average persons per household, 2.6, for Whiteside County (USGS 1982a, 82b, 83, 85; USDC 1990). Within municipal boundaries, the percent of each city that falls into a distance ring was multiplied by the city's population and then added to that distance ring.

5.5 Air

No documented air releases are known, and none were observed during the SSI.

Approximately 28,000 people live within 4 miles of the site. Populations were calculated as described in Section 5.4. Nearby wetlands and those associated with the Rock River are potential targets of any airborne particulates from the site (USDI 1987a, 87b, 87c, 87d). According to the National Heritage Database, there are no known occurrences of endangered and threatened species, Illinois Natural Area Inventory sites, or dedicated Illinois Nature Preserves within a 4 mile radius of the site (IDOC 1994).

Appendix A

Henry Hoffman Landfill

Site 4-Mile Radius Map
15-Mile Surface Water Route Map

6.0 References

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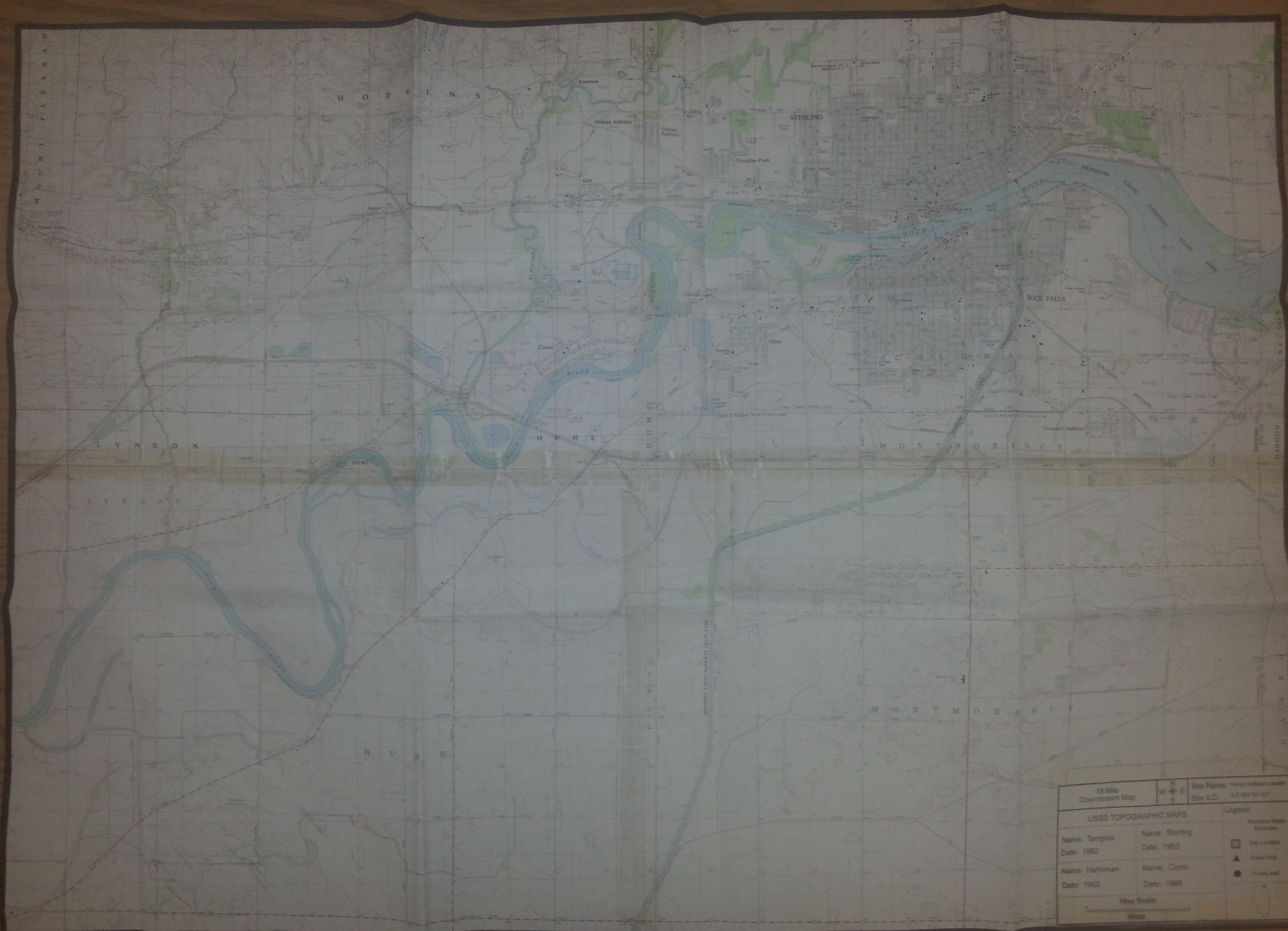
R6E
R7E
HOPKINS
STERLING
Emerson
Grimes Addition
Douglas Park
Galt
ROCK RIVER
HENNEPIN CANAL PARKWAY STATE
Henry Hoffman Landfill
ROCK FALLS
Como
Allen
COLOMA
T 21 N
T 20 N
HUME
MONTMORENCY
Yeoward Addition
R6E
R7E
Site 4-Mile Radius Map
N
W E
S
Site Name: Henry Hoffman Landfill
Site ILD: ILD 984 791 657
USGS TOPOGRAPHIC MAPS
Name: Tampico
Date: 1982
Name: Sterling
Date: 1983
Name: Hahnman
Date: 1982
Name: Como
Date: 1985
Map Scale:
Miles
Legend
Municipal Water Boundary
Site Location
Public Well
Private well


MOUNT PLEASANT
HOPKINS
Emerson
Grimes Addition
Gait
STERLING
Douglas Park
ROCK RIVER
HENNEPIN CANAL PARKWAY STATE PARK
ROCK FALLS
ELKHORN
HOPKINS
Como
Allen
HUME
COLOMA
LYNDON
MONTMORENCY
HARMON
HUME
HUME
HENNEPIN CANAL PARKWAY STATE PARK
15 Mile Downstream Map
N
W E
S
Site Name:
Site ILD:
USGS TOPOGRAPHIC MAPS
Name: Tampico
Date: 1982
Name: Sterling
Date: 1983
Name: Hahnman
Date: 1982
Name: Como
Date: 1985
Legend
Map Scale:
Miles


HOPKINS
Emerson
Grimes Addition
STERLING
Douglas Park
Galt
ROCK RIVER
HENNEPIN CANAL PARKWAY STATE PARK
ROCK FALLS
Como
Allen
LYNDON
HUME
MONTMORENCY
Yeoward Addition
HARMON
NELSON
HOPKINS
ELKHORN
ROCK RIVER
HENNEPIN CANAL PARKWAY STATE PARK
15 Mile Downstream Map
N
W
E
S
Site Name: Henry Hoffman Landfill
Site I.D.: ILD 984 795 683
USGS TOPOGRAPHIC MAPS
Name: Tampico
Date: 1982
Name: Sterling
Date: 1983
Name: Hahnaman
Date: 1982
Name: Como
Date: 1985
Map Scale:
Miles
Legend
Municipal Water Boundary
Site Location
Public Well
Private well

Appendix B

Henry Hoffman Landfill

USEPA Form 2070-13

Site Inspection Report

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D984791657

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Henry Hoffman Landfill	Anixter Road

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Rock Falls	IL	61071	Whiteside	195	16

09 COORDINATES	10 TYPE OF OWNERSHIP (Check one)
LATITUDE 41° 46' 44" / LONGITUDE 89° 43' 40"	[X] A. PRIVATE [ ] B. FEDERAL _____ [ ] C. STATE [ ] D. COUNTY [ ] E. MUNICIPAL [ ] F. OTHER _____ [ ] G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
8 / 24 / 93 (MONTH DAY YEAR)	[ ] ACTIVE [X] INACTIVE	Early 1980's (BEGINNING YEAR) / Late 1980's (ENDING YEAR) ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)
[ ] A. EPA [X] B. EPA CONTRACTOR Black & Veatch Waste (Name of firm) [ ] C. MUNICIPAL [ ] D. MUNICIPAL CONTRACTOR _____ (Name of firm)
[ ] E. STATE [ ] F. STATE CONTRACTOR _____ (Name of firm) [ ] G. OTHER _____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
John Noyes	Hydrogeologist	BVWS	312) 346-3775
09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
Jeff Albano	Biologist	BVWS	312 346-3775 ( )
Mary Lee	Geologist	BVWS	(312 346-3775
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO.
Henry Hoffman	Owner	709 Hoffman Dr.	(815) 625-0381
			( )
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
[X] PERMISSION [ ] WARRANT	0900	clear, sunny, 70s & 80s

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Henry Hoffman	Site Owner	(815) 625-0381

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
John Noyes	EPA	- BVWS	(312)346-3775	4 / 18 / 94 (MONTH DAY YEAR)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D984791657

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- X A. SOLID
- _ B. POWDER, FINES
- _ C. SLUDGE
- _ E. SLURRY
- X F. LIQUID
- _ G. GAS
- X O. OTHER ~~unknown~~ (Specify)

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

- TONS: unknown
- CUBIC YARDS: unknown
- NO. OF DRUMS: unknown

03 WASTE CHARACTERISTICS (Check all that apply)

- _ A. TOXIC
- _ B. CORROSIVE
- _ C. RADIOACTIVE
- X D. PERSISTENT
- _ E. SOLUBLE
- _ F. INFECTIOUS
- _ G. FLAMMABLE
- _ H. IGNITABLE
- _ I. HIGHLY VOLATILE
- _ J. EXPLOSIVE
- _ K. REACTIVE
- _ L. INCOMPATIBLE
- _ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE	unknown		
SOL	SOLVENTS	unknown		
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS	unknown		
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	unknown		

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
OCC	Acetone		unknown	0.020	mg/kg
OCC	Toluene		unknown	0.360	mg/kg
OCC	Phenanthrene		unknown	0.94	mg/kg
OCC	Fluoranthene		unknown	0.95	mg/kg
OCC	Benzo(a)Anthracene		unknown	0.46	mg/kg
OCC	Chrysene		unknown	0.46	mg/kg
OCC	Benzo(b)Fluoranthene		unknown	0.41	mg/kg
OCC	Benzo(a)Pyrene		unknown	0.40	mg/kg
MES	Aluminum		unknown	16,600	mg/kg
MES	Arsenic		unknown	38.4	ug/L
MES	Barium		unknown	241	ug/l
MES	Beryllium		unknown	0.88	mg/kg
MES	Cadmium		unknown	2.0	mg/kg
MES	Chromium		unknown	33.5	mg/kg
MES	Cobalt		unknown	15.8	ug/l
MES	Lead		unknown	38.15	mg/kg

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sampling data, reports)

Preliminary Assessment, IEPA, 1991.
Site Inspection Report, BVWS, 1994.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- _ A. SOLID
- _ B. POWDER, FINES
- _ C. SLUDGE
- _ D. OTHER _____ (Specify)
- _ E. SLURRY
- _ F. LIQUID
- _ G. GAS

02 WASTE QUANTITY AT SITE
Measures of waste quantities must be independent

TONS _____
CUBIC YARDS _____
NO. OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

- _ A. TOXIC
- _ B. CORROSIVE
- _ C. RADIOACTIVE
- _ D. PERSISTENT
- _ E. SOLUBLE
- _ F. INFECTIOUS
- _ G. FLAMMABLE
- _ H. IGNITABLE
- _ I. HIGHLY VOLATILE
- _ J. EXPLOSIVE
- _ K. REACTIVE
- _ L. INCOMPATIBLE
- _ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers) Continued

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
PSD	Dieldrin		unknown	0.0087	mg/kg
PSD	Endrin Aldehyde		unknown	0.012	mg/kg
MES	Calcium		unknown	69,600	mg/kg
MES	Copper		unknown	26.4	mg/kg
MES	Iron		unknown	50,600	ug/L
MES	Magnesium		unknown	40,700	mg/kg
MES	Manganese		unknown	5,940	ug/L
MES	Nickel		unknown	22.2	mg/kg
MES	Potassium		unknown	1,810	mg/kg
MES	Silver		unknown	2.7	mg/kg
MES	Vanadium		unknown	35	mg/kg
MES	Zinc		unknown	121	mg/kg
MES	Selenium		unknown	2.4	ug/L

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sampling analysis, reports)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: IL | 02 SITE NUMBER: D984791657

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 27,639
02 ☐ OBSERVED (DATE: 8-25-93) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Groundwater sampling of onsite monitoring wells indicated the presence of seven inorganic analytes.

01 ☒ B. SURFACE WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: 8-26-93) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Samples from the onsite pond and nearby Rock River indicate the presence of eight organic compounds and sixteen analytes.

01 ☐ C. CONTAMINATION OF AIR
03 POPULATION POTENTIALLY AFFECTED: 27,639
02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
No documented air releases are known, and none were observed during the SSI. However the presence of organic compounds and inorganic analytes at or near the ground surface creates the potential for windblown particulate matter.

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None known or observed.

01 ☒ E. DIRECT CONTACT
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☒ OBSERVED (DATE: 8-24-93) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Six soil samples collected from the site indicated the presence of two organic compounds and two inorganic analytes. This indicates a potential for direct contact with all site visitors.

01 ☒ F. CONTAMINATION OF SOIL
03 AREA POTENTIALLY AFFECTED: 4
02 ☒ OBSERVED (DATE: 8-24-93) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Six soil samples collected from the site indicated the presence of two organic compounds and two inorganic analytes.

01 ☐ G. DRINKING WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 27,639
02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None known or observed.

01 ☐ H. WORKER EXPOSURE/INJURY
03 WORKERS POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
No workers are onsite.

01 ☐ I. POPULATION EXPOSURE/INJURY
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☒ OBSERVED (DATE: 8-24-93) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Six soil samples collected from the site indicated the presence of two organic compounds and two inorganic analytes. This indicates a potential for direct contact with all site visitors.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: IL | 02 SITE NUMBER: D984791657

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None known or observed.

01 ☐ K. DAMAGE TO FAUNA
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include names(s) of species)

None known or observed.

01 ☐ L. CONTAMINATION OF FOOD CHAIN
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None known or observed.

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES (Spills/Runoff/Standing liquids, Leaking containers)
02 ☐ OBSERVED (DATE: 10-17-87) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

Wastes were deposited into unlined gravel pits with standing water.

01 ☐ N. DAMAGE TO OFFSITE PROPERTY
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None known or observed.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None known or observed.

01 ☒ P. ILLEGAL/UNAUTHORIZED DUMPING
02 ☐ OBSERVED (DATE: 5-25-93) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Henry Hoffman stated that unauthorized dumping may have occured.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sampling results)

Preliminary Assessment, IEPA, 1991.
Site Inspection Report, BVWS, 1994.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE: IL | 02 SITE NUMBER: D984791657

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☐ G. STATE (Specify)				
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
☐ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☐ A. SURFACE IMPOUNDMENT		
☐ B. PILES		
☐ C. DRUMS, ABOVE GROUND		
☐ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
☐ F. LANDFILL		
☐ G. LANDFARM		
☒ H. OPEN DUMP	unknown	
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply)

- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☐ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☒ H. OTHER (Specify): none

05 OTHER

- ☐ A. BUILDINGS ON SITE

06 AREA OF SITE: 3 (Acres)

07 COMMENTS

The site was added to CERCLIS in August of 1990 as a result of an unpermitted landfill receiving fill of a questionable nature. Wastes disposed of consisted of road construction and building debris, slaughterhouse wastes, and household wastes.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☐ A. ADEQUATE, SECURE ☐ B. MODERATE ☒ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

The landfill is capped but the cover material does not appear to have a low conductivity but appears silty and sandy. Also, no liners are known to exist.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☐ YES ☒ NO

02 COMMENTS

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

Preliminary Assessment, IEPA, 1991.
Site Inspection Report, BVWS, 1994.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE: IL | 02 SITE NUMBER: D984791657

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as appropriate)

	SURFACE	WELL
COMMUNITY	A. ☐	B. ☒
NON-COMMUNITY	C. ☐	D. ☒

02 STATUS

ENDANGERED	AFFECTED	MONITORED
A. ☐	B. ☐	C. ☐
D. ☐	E. ☐	F. ☐

03 DISTANCE TO SITE

A. 0.75 (mi)

B. 0.25 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☒ A. ONLY SOURCE FOR DRINKING ☐ B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available) ☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Other sources available) ☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER: 27,639

03 DISTANCE TO NEAREST DRINKING WATER WELL: 0.25 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
10 (ft)	north/northwest	10 (ft)	(GPD)	☐ YES ☒ NO

09 DESCRIPTION OF WELLS (Including usage, depth, and location relative to population and buildings)

Approximately 320 private wells exist within four miles of the site, roughly one-third receive water from sand and gravels, the other two-thirds obtain water from the Silurian dolomite. Approximately 4 municipal wells are screened in sand and gravels, and 10 municipal wells are screened in deeper bedrock aquifers.

10 RECHARGE AREA

☒ YES ☐ NO

COMMENTS: Generally, for shallow aquifers the recharge area is local.

11 DISCHARGE AREA

☒ YES ☐ NO

COMMENTS: The shallow sand and gravel aquifer is thought to discharge to the onsite pond and nearby Rock River.

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☒ A. RESERVOIR, RECREATION DRINKING WATER SOURCE ☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES ☐ C. COMMERCIAL, INDUSTRIAL ☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
Onsite Pond	X	0 (mi)
Rock River	☐	0.3 (mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 538 NO. OF PERSONS	B. 11,472 NO. OF PERSONS	C. 22,079 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION: 0.25 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE: many

04 DISTANCE TO NEAREST OFF-SITE BUILDING: 300 feet (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, city, density considerations)

Approximately 27,639 people live within four miles of the site. The site is about one mile west of the towns Rock Falls and Sterling, population 10,633 and 15,700 respectively, which are surrounded by agricultural communities.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION
01 STATE: IL | 02 SITE NUMBER: D984791657

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. 10^{-6} – 10^{-8} cm/sec ☐ B. 10^{-4} – 10^{-6} cm/sec ☒ C. 10^{-4} – 10^{-3} cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☐ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ☐ B. RELATIVELY IMPERMEABLE (10^{-4} – 10^{-6} cm/sec) ☒ C. RELATIVELY PERMEABLE (10^{-2} – 10^{-4} cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH	
10 to 100 (ft)	depth of fill is about 10 to 20 feet (ft)	unknown	

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
0 - 5 (in)	3 (in)	1 %	north	%

09 FLOOD POTENTIAL	10
SITE IS IN 500 YEAR FLOODPLAIN	☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE	OTHER
A. (mi)	B. 0.25 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

(mi)

ENDANGERED SPECIES:

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AGRICULTURAL LANDS: AG LAND
adjacent to site		adjacent to site	
A. 0.0 (mi)	B. 0.25 (mi)	C. 0.0 (mi)	D. (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

The site occupies about four acres of flat grassy land in a rural and agricultural area. It is bordered on the north and west sides by agricultural fields. Immediately to the south is a ten acre pond, south of the pond are agricultural fields and Rock River Provision Co. Immediately to the east of the site is Associated Asphalt, east of which is Anixter Manufucturing and agricultural fields. Approximately one-quarter mile north of the site is the Rock River. The nearest school, Riverdale School, is about three-quarters of a mile south of the site.

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Illinois State Geological Survey, RI194, 1956.
Illinois State Water Survey, Private & PICS Databases, 1993.
U.S.G.S. Topographic Maps, 1982, 83, 85.
National Wetlands Inventory Maps, 1987.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	D984791657

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	four	Natex/Gulf South Environmental Labs, New Orleans, LA SVL Analytical Inc., Kellogg, ID	4/18/94
SURFACE WATER	four sediments	same as above	4/18/94
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL	six	Pacific Analytical, Carlsbad, CA ~~American Analytical & Technical Services,~~ Baton Rouge, LA	4/18/94
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☒ GROUND ☐ AERIAL

02 IN CUSTODY OF U.S. EPA
(Name of organization or individual)

03 MAPS ☐ YES ☒ NO

04 LOCATION OF MAPS

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Site Inspection Report, BVWS, 1994.

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT PART 7 - OWNER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D984791657

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER	08 NAME (PARENT COMPANY, if applicable)	09 D+B NUMBER
Henry Hoffman			

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE
709 Hoffman Drive			

05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE
Rock Falls	IL	61071			

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE

III. PREVIOUS OWNER(S) (List most recent first) / IV. REALTY OWNER(S) (If applicable; list most recent first)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Site Inspection Report, BVWS, 1994.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	D984791657

II. CURRENT OPERATOR (Provide if different from owner)

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER

OPERATOR'S PARENT COMPANY (If applicable)

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D984791657

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D984791657

II PAST RESPONSE ACTIVITIES (Continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ S. CAPPING/COVERING — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D984791657

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ E. CONTAMINATED SOIL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ F. WASTE REPACKAGED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ G. WASTE DISPOSED ELSEWHERE — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ H. ON SITE BURIAL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ I. IN SITU CHEMICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ L. ENCAPSULATION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ N. CUTOFF WALLS — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ P. CUTOFF TRENCHES/SUMP — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D984791657

II PAST RESPONSE ACTIVITIES (Continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ S. CAPPING/COVERING — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sampling results, reports)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	D984791657

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☒ YES ☐ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

On October 17, 1987, the IEPA conducted an investigation of the landfill. Some of the regulations of the Illinois Administrative Code which were observed being violated include refuse dumped into standing water, no personnel or equipment onsite, no gates or fencing, open burning of wastes, and no indications of daily cover.

In August 1989, groundwater monitoring wells were installed onsite. Detailed analyses were performed for one year after well installation and results indicated elevated levels of metals in downgradient wells. After one year, a less rigorous analyses was approved for the samples.

Shelia Murphy of the IEPA conducted a PA on Henry Hoffman Landfill on August 13, 1991. The site was determined to have the potential to impact the environment and nearby populations. A medium priority rating for inspection was assigned to the site.

Current environmental activity at the Henry Hoffman Landfill site is limited to this SSI.

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Preliminary Assessment, IEPA, 1991.

Appendix C

Henry Hoffman Landfill

Target Compound List and
Target Analyte List

Target Compound List

Volatiles

Chloromethane	1,2-Dichloropropane
Bromomethane	Cis-1,3-Dichloropropene
Vinyl Chloride	Trichloroethene
Chloroethane	Dibromochloromethane
Methylene Chloride	1,1,2-Trichloroethane
Acetone	Benzene
Carbon Disulfide	trans-1,3-Dichloropropene
1,1-Dichloroethene	Bromoform
1,1-Dichloroethane	4-Methyl-2-pentanone
1,2-Dichloroethene (total)	2-Hexanone
Chloroform	Tetrachloroethene
1,2-Dichloroethane	Toluene
2-Butanone	1,1,2,2-Tetrachloroethane
1,1,1-Trichloroethane	Chlorobenzene
Carbon Tetrachloride	Ethylbenzene
Bromodichloromethane	Styrene
	Xylene (total)

Source: Target Compound List for water and soil with low or medium levels of volatile and semivolatile organic contaminants, as shown in the Quality Assurance Project Plan for Region V Superfund Site Assessment Program, BVWS, September 27, 1991.

Target Compound List (Continued)

Semivolatiles

Phenol
bis(2-Chloroethyl) ether
2-Chlorophenol
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,2-Dichlorobenzene
2-Methylphenol
2,2-oxybis-(1-Chloropropane)*
4-Methylphenol
N-Nitroso-di-n-dipropylamine
Hexachloroethane
Nitrobenzene
Isophorone
2-Nitrophenol
2,4-Dimethylphenol
bis(2-Chloroethoxy) methane
2,4-Dichlorophenol
1,2,4-Trichlorobenzene
Naphthalene
4-Chloroaniline
Hexachlorobutadiene
4-Chloro-3-methylhenol
2-Methylnaphthalpene
Hexachlorocyclopentadiene
2,4,6-Trichlorophenol
2,4,5-Trichlorophenol
2-Chloronaphthalene
2-Nitroaniline
Dimethylphthalate
Acenaphthylene
2,6-Dinitrotoluene
3-Nitroaniline
Acenaphthene
2,4-Dinitrophenol
4-Nitrophenol
Dibenzofuran
2,4-Dinitrotoluene
Diethylphthalate
4-Chlorphenyl-phenylether
Fluorene
4-Nitroaniline
4,6-Dinitro-2-methylphenol
N-Nitrosodiphenylamine
4-Bromophenyl-phenyether
Hexachlorobenzene
Pentachlorophenol
Phenanthrene
Anthracene
Carbazole
Di-n-butylphthalate
Fluoranthene
Pyrene
Butyl benzyl phthalate
3,3'-Dichlorbenzidine
Benzo(a)anthracene
Chrysene
bis(2-Ethylhexyl)phthalate
Di-n-Octylphthalate
Benzo(b)fluoranthene
Benzo(k)fluoranthene
Benzo(a)pyrene
Indeno(1,2,3-cd)pyrene
Dibenzo(a,h)anthracene
Benzo(g,h,i)perylene

*Previously known by the name of bis(2-chlorousipropyl) ether.

Source: Target Compound List for water and soil with low or medium levels of volatile and semivolatile organic contaminants, as shown in the Quality Assurance Project Plan for Region V Superfund Site Assessment Program, BVWS, September 27, 1991.

Target Compound List (Continued)

Pesticide/PCB

alpha-BHC	4,4'-DDT
beta-BHC	Methoxychlor
delta-BHC	Endrin ketone
gamma-BHC (Lindane)	Endrin aldehyde
Heptachlor	alpha-Chlordane
Aldrin	gamma-Chlordane
Heptachlor epoxide	Toxaphene
Endosulfan I	Aroclor-1016
Dieldrin	Aroclor-1221
4,4'-DDE	Aroclor-1232
Endrin	Aroclor-1242
Endosulfan II	Aroclor-1248
4,4'-DDD	Aroclor-1254
Endosulfan sulfate	Aroclor-1260

Source: Target Compound List for water and soil containing less than high concentrations of pesticides/aroclors, as shown in the Quality Assurance Project Plan for Region V Superfund Site Assessment Program, BVWS, September 27, 1991.

Target Analyte List

Aluminum	Magnesium
Antimony	Manganese
Arsenic	Mercury
Barium	Nickel
Beryllium	Potassium
Cadmium	Selenium
Calcium	Silver
Chromium	Sodium
Cobalt	Thallium
Copper	Vanadium
Iron	Zinc
Lead	Cyanide

Source: Target Analyte List in the Quality Assurance Project Plan for Region V Superfund Site Assessment Program, BVWS, September 27, 1991.

Appendix D
Henry Hoffman Landfill
Analytical Results

Contents

Data Qualifiers		
Analysis	Qualifier	Description
Organic	U	Compound was analyzed but not detected. The associated numerical value is the sample quantitation limit.
	D	This flag identifies all compounds identified in an analysis at a secondary dilution factor. The flag alerts data users that discrepancies between concentrations reported may be due to dilution of the sample or extract.
	J	An estimated value. This flag is used either when estimating a concentration for tentatively identified compounds (TICs) where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria with the result less than the sample quantitation limit but greater than zero.
	B	Compound found in associated blank.
	P	Greater than twenty-five percent difference for detected concentrations.
Inorganic	U	Compound was analyzed for but not detected. The associated numerical value is the sample quantitation limit.
	J	An estimated value.
	S	The reported value is less than the Contract Required Detection Limit (CRDL), but greater than or equal to the instrument detection.
	M	Duplicate injection precision not met.
	B	The reported value is less than the CRDL, but greater than or equal to the Instrument Detection Limit.
	E	The reported value is estimated due to interference.
	N	Spiked sample recovery not within control limits.
	W	Post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50 percent of spike absorbance.

Volatile Organic Analysis for Groundwater Samples Henry Hoffman Landfill				
Volatile Compound	Sample Locations and Number Concentrations in ug/L			
	GW01	GW02	GW03	GW04 Background
Chloromethane	10 UJ	10 UJ	10 UJ	10 UJ
Bromomethane	10 U	10 U	10 U	10 U
Vinyl Chloride	10 UJ	10 UJ	10 UJ	10 UJ
Chloroethane	10 U	10 U	10 U	10 U
Methylene Chloride	10 UJ	10 UJ	10 UJ	10 UJ
Acetone	7 J	10 UJ	10 UJ	10 UJ
Carbon Disulfide	10 U	10 U	10 U	10 U
1,1-Dichloroethene	10 U	10 U	10 U	10 U
1,1-Dichloroethane	10 U	10 U	10 U	10 U
1,2-Dichloroethene (total)	10 U	10 U	10 U	10 U
Chloroform	10 U	10 U	10 U	10 U
1,2-Dichloroethane	10 U	10 U	10 U	10 U
2-Butanone	10 UJ	10 UJ	10 UJ	10 UJ
1,1,1-Trichloroethane	10 U	10 U	10 U	10 U
Carbon Tetrachloride	10 U	10 U	10 U	10 U
Bromodichloromethane	10 U	10 U	10 U	10 U
1,2-Dichloropropane	10 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	10 U	10 U	10 U	10 U
Trichloroethene	10 U	10 U	10 U	10 U
Dibromochloromethane	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U
Benzene	10 U	10 U	10 U	10 U
trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U
Bromoform	10 U	10 U	10 U	10 U
4-Methyl-2-Pentanone	10 U	10 U	10 U	10 U
2-Hexanone	10 UJ	10 UJ	10 UJ	10 UJ
Tetrachloroethene	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U
Toluene	10 U	10 U	10 U	10 U
Chlorobenzene	10 U	10 U	10 U	10 U
Ethylbenzene	10 U	10 U	10 U	10 U
Styrene	10 U	10 U	10 U	10 U
Xylene (total)	10 U	10 U	10 U	10 U
Total Number of TICS *	0	0	0	0

* Number, not concentrations, of tentatively identified compounds (TICs). gw-voa

Semivolatile Organic Analysis for Groundwater Samples Henry Hoffman Landfill				
Semivolatile Compound	Sample Location and Number Concentrations in ug/L			
	GW01	GW02	GW03	GW04 Background
Phenol	10 U	10 U	10 U	10 U
bis(2-Chloroethyl)Ether	10 U	10 U	10 U	10 U
2-Chlorophenol	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	10 UJ	10 UJ	10 UJ	10 UJ
1,2-Dichlorobenzene	10 U	10 U	10 U	10 U
2-Methylphenol	10 U	10 U	10 U	10 U
2,2'-oxybis(1-Chloropropane)	10 U	10 U	10 U	10 U
4-Methylphenol	10 U	10 U	10 U	10 U
n-Nitroso-Di-n-Propylamine	10 U	10 U	10 U	10 U
Hexachloroethane	10 U	10 U	10 U	10 U
Nitrobenzene	10 U	10 U	10 U	10 U
Isophorone	10 U	10 U	10 U	10 U
2-Nitrophenol	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	10 U	10 U	10 U	10 U
bis(2-Chloroethoxy)Methane	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U
Naphthalene	10 U	10 U	10 U	10 U
4-Chloroaniline	10 U	10 U	10 U	10 U
Hexachlorobutadiene	10 U	10 U	10 U	10 U
4-Chloro-3-Methylphenol	10 U	10 U	10 U	10 U
2-Methylnaphthalene	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	25 U	25 U	25 U	25 U
2-Chloronaphthalene	10 U	10 U	10 U	10 U
2-Nitroaniline	25 U	25 U	25 U	25 U
Dimethyl Phthalate	10 U	10 U	10 U	10 U
Acenaphthylene	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	10 U	10 U	10 U	10 U
3-Nitroaniline	25 U	25 U	25 U	25 U
Acenaphthene	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	25 U	25 U	25 U	25 U
4-Nitrophenol	25 U	25 U	25 U	25 U
Dibenzofuran	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	10 U	10 U	10 U	10 U
Diethylphthalate	10 U	10 U	10 U	10 U
4-Chlorophenyl-phenylether	10 U	10 U	10 U	10 U
Fluorene	10 U	10 U	10 U	10 U
4-Nitroaniline	25 U	25 U	25 U	25 U
4,6-Dinitro-2-Methylphenol	25 U	25 U	25 U	25 U

Semivolatile Organic Analysis for Groundwater Samples Henry Hoffman Landfill				
Semivolatile Compound	Sample Location and Number Concentrations in ug/L			
	GW01	GW02	GW03	GW04 Background
n-Nitrosodiphenylamine	10 U	10 U	10 U	10 U
4-Bromophenyl-phenylether	10 U	10 U	10 U	10 U
Hexachlorobenzene	10 U	10 U	10 U	10 U
Pentachlorophenol	25 U	25 U	25 U	25 U
Phenanthrene	10 U	10 U	10 U	10 U
Anthracene	10 U	10 U	10 U	10 U
Carbazole	10 U	10 U	10 U	10 U
di-n-Butylphthalate	10 U	10 U	10 U	10 U
Fluoranthene	10 U	10 U	10 U	10 U
Pyrene	10 U	10 U	10 U	10 U
Butylbenzylphthalate	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	10 U	10 U	10 U	10 U
Benzo(a)Anthracene	10 U	10 U	10 U	10 U
Chrysene	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)Phthalate	10 UJB	10 UJB	10 UJB	10 U
di-n-Octyl Phthalate	10 U	10 U	10 U	10 U
Benzo(b)Fluoranthene	10 U	10 U	10 U	10 U
Benzo(k)Fluoranthene	10 U	10 U	10 U	10 U
Benzo(a)Pyrene	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)Pyrene	10 U	10 U	10 U	10 U
Dibenzo(a,h)Anthracene	10 U	10 U	10 U	10 U
Benzo(g,h,i)Perylene	10 U	10 U	10 U	10 U
Total Number of TICs *	0	0	0	0

* Number, not concentration, of tentatively identified compounds (TICs).

Pesticide and PCB Analysis for Groundwater Samples Henry Hoffman Landfill				
Pesticide/ PCB	Sample Locations and Number Concentrations in ug/L			
	GW01	GW02	GW03	GW04 Background
Alpha-BHC	0.050 UJ	0.050 UJ	0.050 U	0.050 UJ
Beta-BHC	0.050 UJ	0.050 UJ	0.050 U	0.050 UJ
Delta-BHC	0.050 UJ	0.050 UJ	0.050 U	0.050 UJ
Gamma-BHC (Lindane)	0.050 UJ	0.050 UJ	0.050 U	0.050 UJ
Heptachlor	0.050 UJ	0.050 UJ	0.050 U	0.050 UJ
Aldrin	0.050 UJ	0.050 UJ	0.050 U	0.050 UJ
Heptachlor Epoxide	0.050 UJ	0.050 UJ	0.050 U	0.050 UJ
Endolsulfan I	0.050 UJ	0.050 UJ	0.050 U	0.050 UJ
Dieldrin	0.10 UJ	0.10 UJ	0.10 U	0.10 UJ
4,4'-DDE	0.10 UJ	0.10 UJ	0.10 U	0.10 UJ
Endrin	0.10 UJ	0.10 UJ	0.10 U	0.10 UJ
Endosulfan II	0.10 UJ	0.10 UJ	0.10 U	0.10 UJ
4,4'-DDD	0.10 UJ	0.10 UJ	0.10 U	0.10 UJ
Endosulfan Sulfate	0.10 UJ	0.10 UJ	0.10 U	0.10 UJ
4,4'-DDT	0.10 UJ	0.10 UJ	0.10 U	0.10 UJ
Methoxychlor	0.50 UJ	0.50 UJ	0.50 U	0.50 UJ
Endrin Ketone	0.10 UJ	0.10 UJ	0.10 U	0.10 UJ
Endrin Aldehyde	0.10 UJ	0.10 UJ	0.10 U	0.10 UJ
Alpha-Chlordane	0.050 UJ	0.050 UJ	0.050 U	0.050 UJ
Gamma-Chlordane	0.050 UJ	0.050 UJ	0.050 U	0.050 UJ
Toxaphene	5.0 UJ	5.0 UJ	5.0 U	5.0 UJ
Aroclor-1016	1.0 UJ	1.0 UJ	1.0 U	1.0 UJ
Aroclor-1221	2.0 UJ	2.0 UJ	2.0 U	2.0 UJ
Aroclor-1232	1.0 UJ	1.0 UJ	1.0 U	1.0 UJ
Aroclor-1242	1.0 UJ	1.0 UJ	1.0 U	1.0 UJ
Aroclor-1248	1.0 UJ	1.0 UJ	1.0 U	1.0 UJ
Aroclor-1254	1.0 UJ	1.0 UJ	1.0 U	1.0 UJ
Aroclor-1260	1.0 UJ	1.0 UJ	1.0 U	1.0 UJ

gwpest

Inorganic Analysis for Groundwater Samples
Henry Hoffman Landfill

Metals and Cyanide	Sample Locations and Number Concentrations in ug/L			
	GW01	GW02	GW03	GW04 Background
Aluminum	31.0 U	31.0 U	31.0 U	31.0 U
Antimony	38.0 U	38.0 U	38.0 U	38.0 U
Arsenic	38.4	1.0 U	7.4 B	1.0 U
Barium	241	68.2 B	146 B	41.2 B
Beryllium	1.0 U	1.0 U	1.0 U	1.0 U
Cadmium	4.0 U	4.0 U	4.0 U	4.0 U
Calcium	237000 J	64100 J	34500 J	53400 J
Chromium	4.0 U	4.0 U	4.0 U	4.0 U
Cobalt	15.8 B	6.0 U	6.0 U	6.0 U
Copper	14.4 B	4.0 U	7.3 B	4.0 U
Iron	50600 J	66.6 UB	459 J	78.4 JB
Lead	5.1 UJW	2.1 UJBW	6.0 UJW	3.1 UJW
Magnesium	61700 J	29000 J	16800 J	22300 J
Manganese	5940	132	370	672
Mercury	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	15.0 U	15.0 U	15.0 U	15.0 U
Potassium	1800 B	2040 B	2210 B	2080 B
Selenium	1.0 JBNW	2.4 JBNW	1.0 UJN	1.0 UJN
Silver	6.0 U	6.0 U	6.0 U	6.0 U
Sodium	34900 J	11600 J	14100 J	16700 J
Thallium	1.0 U	1.2 JB	1.0 U	1.0 U
Vanadium	4.0 U	4.0 U	4.0 U	4.0 U
Zinc	21.3 U	6.0 U	22.3 U	77.6 J
Cyanide	10.0 U	10.0 U	10.0 U	10.0 U

gwmetals

Volatile Organic Analysis for Sediment Samples Henry Hoffman Landfill				
Volatile Compound	Sample Location and Number Concentrations in ug/kg			
	ST01	ST02	ST03 Background	ST04
Chloromethane	12 U	11 U	13 U	17 U
Bromomethane	12 U	11 U	13 U	17 U
Vinyl Chloride	12 U	11 U	13 U	17 U
Chloroethane	12 U	11 U	13 U	17 U
Methylene Chloride	12 UJB	16 UB	19 UB	17 UJB
Acetone	12 U	6 J	4 J	17 U
Carbon Disulfide	12 U	11 U	13 U	17 U
1,1-Dichloroethene	12 U	11 U	13 U	17 U
1,1-Dichloroethane	12 U	11 U	13 U	17 U
1,2-Dichloroethene (total)	12 U	11 U	13 U	17 U
Chloroform	12 U	11 U	13 U	17 U
1,2-Dichloroethane	12 U	11 U	13 U	17 U
2-Butanone	12 UJ	11 UJ	13 UJ	17 UJ
1,1,1-Trichloroethane	12 U	11 U	13 U	17 U
Carbon Tetrachloride	12 U	11 U	13 U	17 U
Bromodichloromethane	12 U	11 U	13 U	17 U
1,2-Dichloropropane	12 U	11 U	13 U	17 U
cis-1,3-Dichloropropene	12 U	11 U	13 U	17 U
Trichloroethene	12 U	11 U	13 U	17 U
Dibromochloromethane	12 U	11 U	13 U	17 U
1,1,2-Trichloroethane	12 U	11 U	13 U	17 U
Benzene	12 U	11 U	13 U	17 U
trans-1,3-Dichloropropene	12 U	11 U	13 U	17 U
Bromoform	12 U	11 U	13 U	17 U
4-Methyl-2-Pentanone	12 U	11 U	13 U	17 U
2-Hexanone	12 U	11 U	13 U	17 U
Tetrachloroethene	12 U	11 U	13 U	17 U
1,1,2,2-Tetrachloroethane	12 U	11 U	13 U	17 U
Toluene	12 U	3 J	13 U	17 U
Chlorobenzene	12 U	11 U	13 U	17 U
Ethylbenzene	12 U	11 U	13 U	17 U
Styrene	12 U	11 U	13 U	17 U
Xylene (total)	12 U	11 U	13 U	17 U
Total Number of TICS *	0	0	0	0

* Number, not concentrations, of tentatively identified compounds (TICs). SED-VOL

Semivolatile Organic Analysis for Sediment Samples
Henry Hoffman Landfill

Semivolatile Compound	Sample Location and Number Concentrations in ug/kg			
	ST01	ST02	ST03 Background	ST04
Phenol	380 U	380 U	430 U	550 U
bis(2-Chloroethyl)Ether	380 U	380 U	430 U	550 U
2-Chlorophenol	380 U	380 U	430 U	550 U
1,3-Dichlorobenzene	380 U	380 U	430 U	550 U
1,4-Dichlorobenzene	380 U	380 U	430 U	550 U
1,2-Dichlorobenzene	380 U	380 U	430 U	550 U
2-Methylphenol	380 U	380 U	430 U	550 U
2,2'-oxybis(1-Chloropropane)	380 U	380 U	430 U	550 U
4-Methylphenol	380 U	380 U	430 U	550 U
n-Nitroso-Di-n-Propylamine	380 U	380 U	430 U	550 U
Hexachloroethane	380 U	380 U	430 U	550 U
Nitrobenzene	380 U	380 U	430 U	550 U
Isophorone	380 U	380 U	430 U	550 U
2-Nitrophenol	380 U	380 U	430 U	550 U
2,4-Dimethylphenol	380 U	380 U	430 U	550 U
bis(2-Chloroethoxy)Methane	380 U	380 U	430 U	550 U
2,4-Dichlorophenol	380 U	380 U	430 U	550 U
1,2,4-Trichlorobenzene	380 U	380 U	430 U	550 U
Naphthalene	380 U	380 U	430 U	550 U
4-Chloroaniline	380 UJ	380 UJ	430 UJ	550 UJ
Hexachlorobutadiene	380 U	380 U	430 U	550 U
4-Chloro-3-Methylphenol	380 U	380 U	430 U	550 U
2-Methylnaphthalene	380 U	380 U	430 U	550 U
Hexachlorocyclopentadiene	380 U	380 U	430 U	550 U
2,4,6-Trichlorophenol	380 U	380 U	430 U	550 U
2,4,5-Trichlorophenol	920 U	910 U	1000 U	1300 U
2-Chloronaphthalene	380 U	380 U	430 U	550 U
2-Nitroaniline	920 U	910 U	1000 U	1300 U
Dimethyl Phthalate	380 U	380 U	430 U	550 U
Acenaphthylene	380 U	380 U	430 U	550 U
2,6-Dinitrotoluene	380 U	380 U	430 U	550 U
3-Nitroaniline	920 UJ	910 UJ	1000 UJ	1300 UJ
Acenaphthene	380 U	61 UJ	430 U	550 U
2,4-Dinitrophenol	920 U	910 U	1000 U	1300 U
4-Nitrophenol	920 U	910 U	1000 U	1300 U
Dibenzofuran	380 U	380 U	430 U	550 U
2,4-Dinitrotoluene	380 U	380 U	430 U	550 U
Diethylphthalate	380 U	380 U	430 U	550 U
4-Chlorophenyl-phenylether	380 U	380 U	430 U	550 U
Fluorene	380 U	93 J	430 U	550 U

Semivolatile Organic Analysis for Sediment Samples
Henry Hoffman Landfill

Semivolatile Compound	Sample Location and Number Concentrations in ug/kg			
	ST01	ST02	ST03 Background	ST04
4-Nitroaniline	920 U	910 U	1000 U	1300 U
4,6-Dinitro-2-Methylphenol	920 U	910 U	1000 U	1300 U
n-Nitrosodiphenylamine (1)	380 UJ	380 UJ	430 UJ	550 UJ
4-Bromophenyl-phenylether	380 U	380 U	430 U	550 U
Hexachlorobenzene	380 U	380 U	430 U	550 U
Pentachlorophenol	920 U	910 U	1000 U	1300 U
Phenanthrene	380 U	940	430 U	76 J
Anthracene	380 U	220 J	430 U	550 U
Carbazole	380 UJ	470 J	430 UJ	550 UJ
di-n-Butylphthalate	380 U	380 U	430 U	550 U
Fluoranthene	380 U	950	80 J	130 J
Pyrene	380 U	100	88 J	210 J
Butylbenzylphthalate	380 U	380 U	430 U	57 J
3,3'-Dichlorobenzidine	380 U	380 U	430 U	550 U
Benzo(a)Anthracene	380 U	460	44 J	100 J
Chrysene	380 U	460	49 J	120 J
bis(2-Ethylhexyl)Phthalate	380 UJB	380 UJB	430 UJB	550 UJB
di-n-Octyl Phthalate	380 UJ	380 UJ	430 UJ	550 UJ
Benzo(b)Fluoranthene	380 U	410	41 J	130 J
Benzo(k)Fluoranthene	380 U	340 J	31 J	77 J
Benzo(a)Pyrene	380 U	400	49 J	120 J
Indeno(1,2,3-cd)Pyrene	380 U	380	430 U	110 J
Dibenzo(a,h)Anthracene	380 U	97 J	430 U	550 U
Benzo(g,h,i)Perylene	380 U	270 J	38 J	550 U
Total Number of TICs	5	23	12	23

sedim-sv

Pesticide and PCB Analysis for Sediment Samples Henry Hoffman Landfill				
Pesticide/ PCB	Sample Location and Number Concentrations in ug/kg			
	ST01	ST02	ST03 Background	ST04
Alpha-BHC	2.0 U	19 U	2.2 U	2.8 U
Beta-BHC	2.0 U	19 U	2.2 U	2.8 U
Delta-BHC	2.0 U	19 U	2.2 U	2.8 U
Gamma-BHC (Lind.)	2.0 U	19 U	2.2 U	2.8 U
Heptachlor	2.0 U	19 U	2.2 U	2.8 U
Aldrin	2.0 U	19 U	2.2 U	2.8 U
Heptachlor Epoxide	2.0 U	19 U	2.2 U	2.8 U
Endosulfan I	2.0 U	19 U	2.2 U	2.8 U
Dieldrin	3.8 U	37 U	4.3 U	8.7 P
4,4'-DDE	3.8 U	37 U	4.3 U	5.5 U
Endrin	3.8 U	37 U	4.3 U	5.5 U
Endosulfan II	3.8 U	37 U	4.3 U	5.5 U
4,4'-DDD	3.8 U	37 U	4.3 U	5.5 U
Endosulfan Sulfate	3.8 U	37 U	4.3 U	5.5 U
4,4'-DDT	3.8 U	37 U	4.3 U	5.5 U
Methoxychlor	20 U	190 U	22 U	28 U
Endrin Ketone	3.8 U	37 U	4.3 U	5.5 U
Endrin Aldehyde	3.8 U	37 U	4.3 U	12 P
Alpha-Chlordane	2.0 U	19 U	2.2 U	2.8 U
Gamma-Chlordane	2.0 U	19 U	2.2 U	2.8 U
Toxaphene	200 U	1900 U	220 U	280 U
Aroclor-1016	38 U	370 U	43 U	55 U
Aroclor-1221	77 U	760 U	87 U	110 U
Aroclor-1232	38 U	370 U	43 U	55 U
Aroclor-1242	38 U	370 U	43 U	55 U
Aroclor-1248	38 U	370 U	43 U	55 U
Aroclor-1254	38 U	370 U	43 U	55 U
Aroclor-1260	38 U	370 U	43 U	55 U

PESTSED

Inorganic Analysis for Sediment Samples Henry Hoffman Landfill				
Metals and Cyanide	Sample Location and Number Concentrations in mg/kg			
	ST01	ST02	ST03 Background	ST04
Aluminum	1390	7490	1980	16600
Antimony	8.6 U	9.1 U	9.5 U	13.1 U
Arsenic	1.3 JBW	3.5 S	1.4 B	6.0 S
Barium	19.5 B	107	15.8 B	177
Beryllium	0.23 U	0.45 B	0.25 U	0.88 B
Cadmium	0.91 U	0.96 U	1.00 U	2.0
Calcium	36100	18100	23600	37800
Chromium	4.5	33.5	6.1	27.7
Cobalt	2.9 B	8.0 B	2.0 B	10.7 B
Copper	4.5 B	14.8	4.4 B	26.4
Iron	3760 *	13000 *	3920 *	21600 *
Lead	2.9	38.1 S	7.0 S	30.5 S
Magnesium	17300	9740	13700	8390
Manganese	274 JN*	855 JN*	90.7 JN*	984 JN*
Mercury	0.11 U	0.12 U	0.12 U	0.17 U
Nickel	4.2 B	10.2	6.0 B	22.2
Potassium	270 B	695 B	259 B	1810
Selenium	0.23 U	0.59 JB	0.25 U	0.97 JB
Silver	1.4 U	1.4 U	1.5 U	2.7 B
Sodium	73.6 B	59.2 JB	55.3 B	118 B
Thallium	0.25 B	0.27 JB	0.38 JB	0.53 JB
Vanadium	7.2 B	21.7	6.7 B	35.0
Zinc	11.2	44.5	21.4	121
Cyanide	0.57 U	0.60 U	0.62 U	0.86 U

sedmetal

Volatile Organic Analysis for Surface Soil Samples
Henry Hoffman Landfill SSI

Volatile Compound	Sample Location and Number Concentrations in ug/kg					
	SS01	SS02	SS03	SS04	SS05	SS06 Background
Chloromethane	11 U	11 U	11 U	11 U	11 U	12 U
Bromomethane	11 U	11 U	11 U	11 U	11 U	12 U
Vinyl Chloride	11 U	11 U	11 U	11 U	11 U	12 U
Chloroethane	11 UJ	11 U	11 U	11 U	11 UJ	12 UJ
Methylene Chloride	46	30	35	14	17	11 J
Acetone	15	20	10 J	17	11 U	12 U
Carbon Disulfide	11 U	11 U	11 U	11 U	11 U	12 U
1,1-Dichloroethene	11 U	11 U	11 U	11 U	11 U	12 U
1,1-Dichloroethane	11 U	11 U	11 U	11 U	11 U	12 U
1,2-Dichloroethene (total)	11 U	11 U	11 U	11 U	11 U	12 U
Chloroform	11 U	11 U	11 U	11 U	11 U	12 U
1,2-Dichloroethane	11 U	11 U	11 U	11 U	11 U	12 U
2-Butanone	11 U	11 U	11 U	11 U	11 U	12 U
1,1,1-Trichloroethane	11 U	11 U	11 U	11 U	11 U	12 U
Carbon Tetrachloride	11 U	11 U	11 U	11 U	11 U	12 U
Bromodichloromethane	11 U	11 U	11 U	11 U	11 U	12 U
1,2-Dichloropropane	11 U	11 U	11 U	11 U	11 U	12 U
cis-1,3-Dichloropropene	11 U	11 U	11 U	11 U	11 U	12 U
Trichloroethene	11 U	11 U	11 U	11 U	11 U	12 U
Dibromochloromethane	11 U	11 U	11 U	11 U	11 U	12 U
1,1,2-Trichloroethane	11 U	11 U	11 U	11 U	11 U	12 U
Benzene	11 U	11 U	11 U	11 U	11 U	12 U
trans-1,3-Dichloropropene	11 U	11 U	11 U	11 U	11 U	12 U
Bromoform	11 U	11 U	11 U	11 U	11 U	12 U
4-Methyl-2-Pentanone	11 U	11 U	11 U	11 U	11 U	12 U
2-Hexanone	11 U	11 U	11 U	11 U	11 U	12 U
Tetrachloroethene	11 U	11 U	11 U	11 U	11 U	12 U
1,1,2,2-Tetrachloroethane	11 U	11 U	11 U	11 U	11 U	12 U
Toluene	24	180	83	82	360 D	120
Chlorobenzene	11 U	11 U	11 U	11 U	11 U	12 U
Ethylbenzene	11 U	11 U	11 U	11 U	11 U	12 U
Styrene	11 U	11 U	11 U	11 U	11 U	12 U
Xylene (total)	11 U	11 U	11 U	11 U	11 U	12 U
Total Number of TICs *	0	0	0	0	0	0

* - Number, not concent ations, of tentatively identified compounds (TICs) found in each sample.

soilvoa

Semiv latile Organic Analysis for Surface Soil Samples
Henry Hoffman Landfill

Semivolatile Compound	Sample Location and Number Concentrations in ug/kg					
	SS01	SS02	SS03	SS04	SS05	SS06 Background
Phenol	370 U	370 U	370 U	360 U	350 U	380 U
bis(2-Chloroethyl)Ether	370 U	370 U	370 U	360 U	350 U	380 U
2-Chlorophenol	370 U	370 U	370 U	360 U	350 U	380 U
1,3-Dichlorobenzene	370 U	370 U	370 U	360 U	350 U	380 U
1,4-Dichlorobenzene	370 U	370 U	370 U	360 U	350 U	380 U
1,2-Dichlorobenzene	370 U	370 U	370 U	360 U	350 U	380 U
2-Methylphenol	370 U	370 U	370 U	360 U	350 U	380 U
2,2'-Oxybis(1-Chloropropane)	370 UJ	370 UJ	370 UJ	360 UJ	350 UJ	380 U
4-Methylphenol	370 U	370 U	370 U	360 U	350 U	380 U
n-Nitroso-di-n-propylamine	370 U	370 U	370 U	360 U	350 U	380 U
Hexachloroethane	370 U	370 U	370 U	360 U	350 U	380 U
Nitrobenzene	370 U	370 U	370 U	360 U	350 U	380 U
Isophorone	370 U	370 U	370 U	360 U	350 U	380 U
2-Nitrophenol	370 U	370 U	370 U	360 U	350 U	380 U
2,4-Dimethylphenol	370 U	370 U	370 U	360 U	350 U	380 U
bis(2-Chloroethoxy)Methane	370 U	370 U	370 U	360 U	350 U	380 U
2,4-Dichlorophenol	370 U	370 U	370 U	360 U	350 U	380 U
1,2,4-Trichlorobenzene	370 U	370 U	370 U	360 U	350 U	380 U
Naphthalene	370 U	370 U	370 U	360 U	350 U	380 U
4-Chloroaniline	370 U	370 U	370 U	360 U	350 U	380 U
Hexachlorobutadiene	370 U	370 U	370 U	360 U	350 U	380 U
4-Chloro-3-Methylphenol	370 U	370 U	370 U	360 U	350 U	380 U
2-Methylnaphthalene	370 U	370 U	370 U	360 U	350 U	380 U
Hexachlorocyclopentadiene	370 U	370 U	370 U	360 U	350 U	380 U
2,4,6-Trichlorophenol	370 U	370 U	370 U	360 U	350 U	380 U
2,4,5-Trichlorophenol	890 U	890 U	900 U	880 U	860 U	930 U
2-Chloronaphthalene	370 U	370 U	370 U	360 U	350 U	380 U
2-Nitroaniline	890 U	890 U	900 U	880 U	860 U	930 U
Dimethyl Phthalate	370 U	370 U	370 U	360 U	350 U	380 U
Acenaphthylene	370 U	370 U	370 U	360 U	350 U	380 U
2,6-Dinitrotoluene	370 U	370 U	370 U	360 U	350 U	380 U
3-Nitroaniline	890 U	890 U	900 U	880 U	860 U	930 U
Acenaphthene	370 U	370 U	370 U	360 U	350 U	380 U
2,4-Dinitrophenol	890 UJ	890 UJ	900 UJ	880 UJ	860 UJ	930 U
4-Nitrophenol	890 U	890 U	900 U	880 U	860 U	930 U
Dibenzofuran	370 U	370 U	370 U	360 U	350 U	380 U
2,4-Dinitrotoluene	370 U	370 U	370 U	360 U	350 U	380 U
Diethylphthalate	370 U	370 U	370 U	360 U	350 U	380 U
4-Chlorophenyl Phenyl Ether	370 U	370 U	370 U	360 U	350 U	380 U
Fluorene	370 U	370 U	370 U	360 U	350 U	380 U

Semiv latile Organic Analysis for Surface Soil Samples
Henry Hoffman Landfill

Semivolatile Compound	Sample Location and Number Concentrations in ug/kg					
	SS01	SS02	SS03	SS04	SS05	SS06 Background
4-Nitroaniline	890 U	890 U	900 U	880 U	860 U	930 U
4,6-Dinitro-2-Methylphenol	890 U	890 U	900 U	880 U	860 U	930 U
n-Nitrosodiphenylamine	370 U	370 U	370 U	360 U	350 U	380 U
4-Bromophenyl Phenyl Ether	370 U	370 U	370 U	360 U	350 U	380 U
Hexachlorobenzene	370 U	370 U	370 U	360 U	350 U	380 U
Pentachlorophenol	890 U	890 U	900 U	880 U	860 U	930 U
Phenanthrene	370 U	370 J	370 U	360 U	210 J	380 U
Anthracene	370 U	370 U	370 U	360 U	350 U	380 U
Carbazole	370 U	370 U	370 U	360 U	350 U	380 U
di-n-Butylphthalate	370 U	370 U	370 U	360 U	350 U	380 U
Fluoranthene	370 U	130 J	370 U	360 U	310 J	380 U
Pyrene	370 U	140 J	370 U	360 U	320 J	380 U
Butyl Benzyl Phthalate	370 U	370 U	370 U	360 U	350 U	380 U
3,3'-Dichlorobenzidine	370 U	370 U	370 U	360 U	350 U	380 U
Benzo(a)Anthracene	370 U	370 U	370 U	360 U	160 J	380 U
Chrysene	370 U	370 U	370 U	360 U	170 J	380 U
bis(2-Ethylhexyl)Phthalate	370 U	370 U	370 U	360 U	350 U	380 U
di-n-Octyl Phthalate	370 U	370 U	370 U	360 U	350 U	380 U
Benzo(b)Fluoranthene	370 U	120 J	370 U	360 U	290 J	380 U
Benzo(k)Fluoranthene	370 U	370 U	370 U	360 U	350 U	380 U
Benzo(a)Pyrene	370 U	370 U	370 U	360 U	150 J	380 U
Indeno(1,2,3-cd)Pyrene	370 U	370 U	370 U	360 U	350 U	380 U
Dibenzo(a,h)Anthracene	370 U	370 U	370 U	360 U	350 U	380 U
Benzo(g,h,i)Perylene	370 U	370 U	370 U	360 U	350 U	380 U
Total Number of TICs *	19	21	21	15	21	6

* - Number, not concentrations, of tentatively identified compounds (TICs) found in each sample.

semisoil

Pesticide and PCB Analysis for Surface Soil Samples
Henry Hoffman Landfill

Pesticide / PCB	Sample Location and Number Concentrations in ug/kg					
	SS01	SS02	SS03	SS04	SS05	SS06 Background
Alpha-BHC	1.9 U	1.9 U	1.9 U	1.9 U	1.8 U	2.0 U
Beta-BHC	1.9 U	0.59 JP	0.19 JP	0.27 JP	1.8 U	2.0 U
Delta-BHC	1.9 U	1.9 U	1.9 U	1.9 U	1.8 U	2.0 U
Gamma-BHC (Lindane	1.9 U	1.9 U	1.9 U	1.9 U	1.8 U	2.0 U
Heptachlor	1.9 U	0.28 J	1.9 U	0.20 JP	0.55 J	2.0 U
Aldrin	1.9 U	1.9 U	1.9 U	1.9 U	1.8 U	2.0 U
Heptachlor Epoxide	1.9 U	1.9 U	0.50 JP	1.9 U	1.8 U	1.7 JP
Endosulfan I	1.9 U	1.9 U	1.9 U	1.9 U	1.8 U	1.6 JP
Dieldrin	6.5 JB	6.0 JB	5.5 JB	2.4 JBP	2.0 JBP	7.8 B
4,4'-DDE	3.7 U	3.7 U	0.78 JP	3.6 U	0.26 JP	3.8 U
Endrin	3.7 U	2.9 JBP	3.7 UJBP	3.6 UJBP	3.5 UJBP	3.8 UJBP
Endosulfan II	3.7 U	0.65 JP	3.7 U	3.6 U	0.51 JP	3.8 U
4,4'-DDD	0.73 JP	0.87 JP	1.3 J	3.6 U	3.5 U	3.8 U
Endosulfan Sulfate	3.7 U	3.7 U	3.7 U	3.6 U	3.5 U	3.8 U
4,4'-DDT	1.5 JP	2.1 JP	1.6 JP	0.76 JP	1.1 JP	3.8 U
Methoxychlor	2.0 JP	3.3 J	0.90 JP	0.53 JP	18 U	20 U
Endrin Ketone	3.7 U	3.7 U	0.86 JP	3.6 U	3.5 U	3.8 U
Endrin Aldehyde	3.7 P	3.7 U	3.7 U	3.6 U	3.5 U	3.8 U
Alpha-Chlordane	1.9 U	0.59 JP	1.9 U	1.9 U	1.8 U	2.0 U
Gamma-Chlordane	1.9 U	1.3 JP	1.9 U	1.9 U	1.8 U	2.0 U
Toxaphene	190 U	190 U	190 U	190 U	180 U	200 U
Aroclor-1016	37 U	37 U	37 U	36 U	35 U	38 U
Aroclor-1221	74 U	74 U	75 U	74 U	72 U	78 U
Aroclor-1232	37 U	37 U	37 U	36 U	35 U	38 U
Aroclor-1242	37 U	37 U	37 U	36 U	35 U	38 U
Aroclor-1248	37 U	37 U	37 U	36 U	35 U	38 U
Aroclor-1254	37 U	37 U	37 U	36 U	35 U	38 U
Aroclor-1260	37 U	37 U	37 U	36 U	35 U	38 U

PESTSOIL

Inorganic Analysis for Surface Soil Samples
Henry Hoffman Landfill

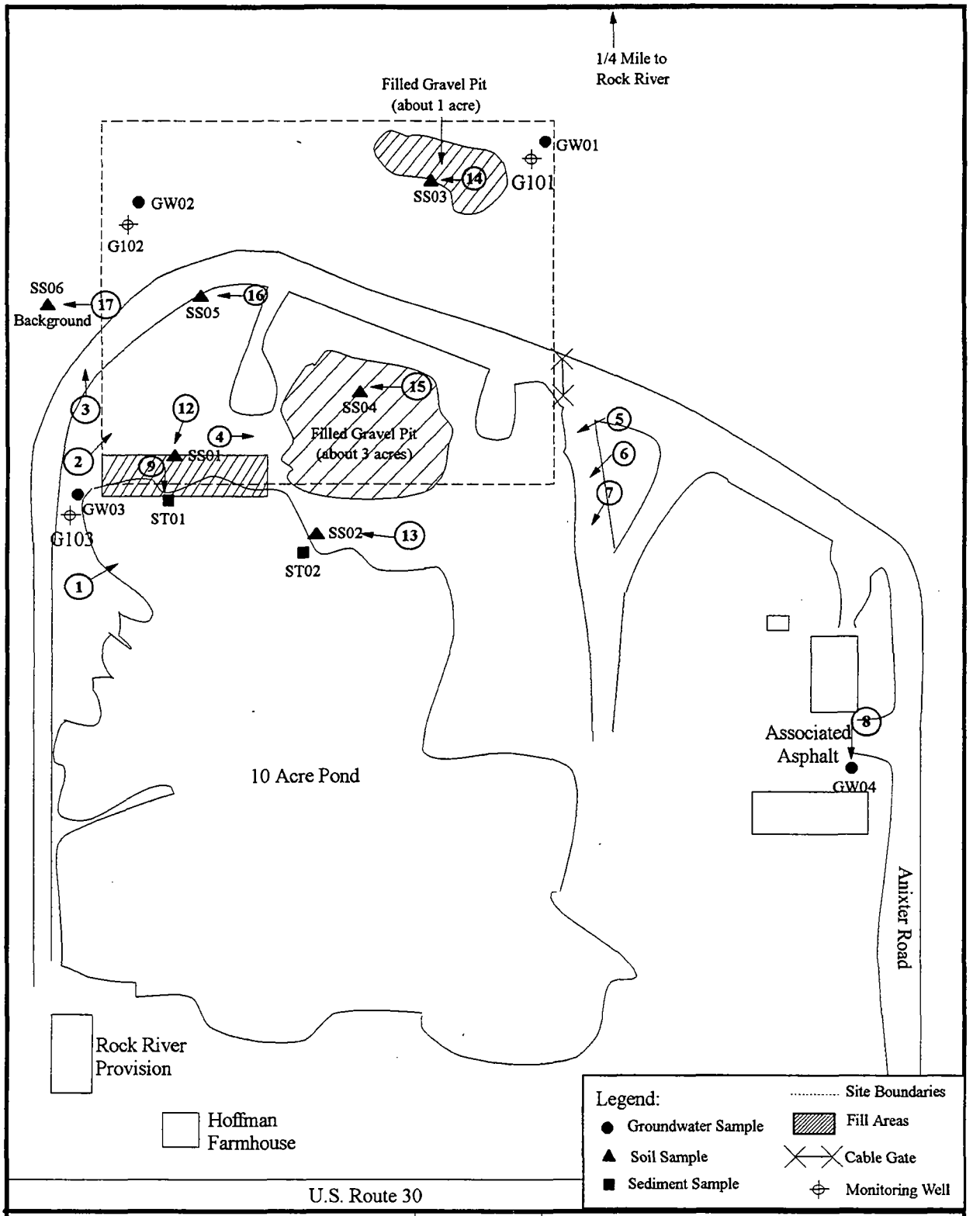
Metals and Cyanide	Sample Locations and Number Concentrations in mg/kg					
	SS01	SS02	SS03	SS04	SS05	SS06 Background
Aluminum	7130 JE*	5470 JE*	6230 JE*	5310 JE*	2770 JE*	10400 JE*
Antimony	5.4 U	5.3 U	5.4 U	5.3 U	5.1 U	5.7 U
Arsenic	0.45 U	1.8 JBM	0.45 U	0.51 JBW	2.4 JM	0.47 U
Barium	104	87.2	85.0	77.7	38.1 B	118
Beryllium	0.28 B	0.22 U	0.22 U	0.22 U	0.21 U	0.37 B
Cadmium	0.92 B	1.4	0.90 U	0.89 U	1.3	1.8
Calcium	8750	18900	16200	12100	69600	3520
Chromium	10.6	7.1	11.6	7.4	5.6	10.4
Cobalt	5.7 B	4.0 B	3.8 B	1.5 B	1.1 U	8.1 B
Copper	7.8	5.9	5.8	7.1	3.5 B	8.5
Iron	11600 JE	8880 JE	9520 JE	7610 JE	6630 JE	14100 JE
Lead	0.45 U	0.45 U	0.45 U	0.44 U	0.43 U	0.47 U
Magnesium	5620	11100	9890	6640	40700	3000
Manganese	686	535	575	267	322	794
Mercury	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U
Nickel	4.9 B	4.8 B	4.4 B	5.6 B	4.3 B	7.6 B
Potassium	923 B	554 B	845 B	605 B	431 B	657 B
Selenium	0.68 U	0.67 U	0.67 U	0.67 U	0.64 U	0.71 UJW
Silver	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U
Sodium	1860 *	2290 *	1550 *	2350 *	2020 *	2430 *
Thallium	0.68 U	0.67 U	0.67 U	0.67 U	0.64 U	0.71 U
Vanadium	17.0	12.3	13.5	9.9 B	8.1 B	20.7
Zinc	37.4	35.9	41.7	35.5	36.2	40.0
Cyanide	0.57 U	0.56	0.56 U	0.56 U	0.53 U	0.60 U

SOILMET.WK3

Appendix E

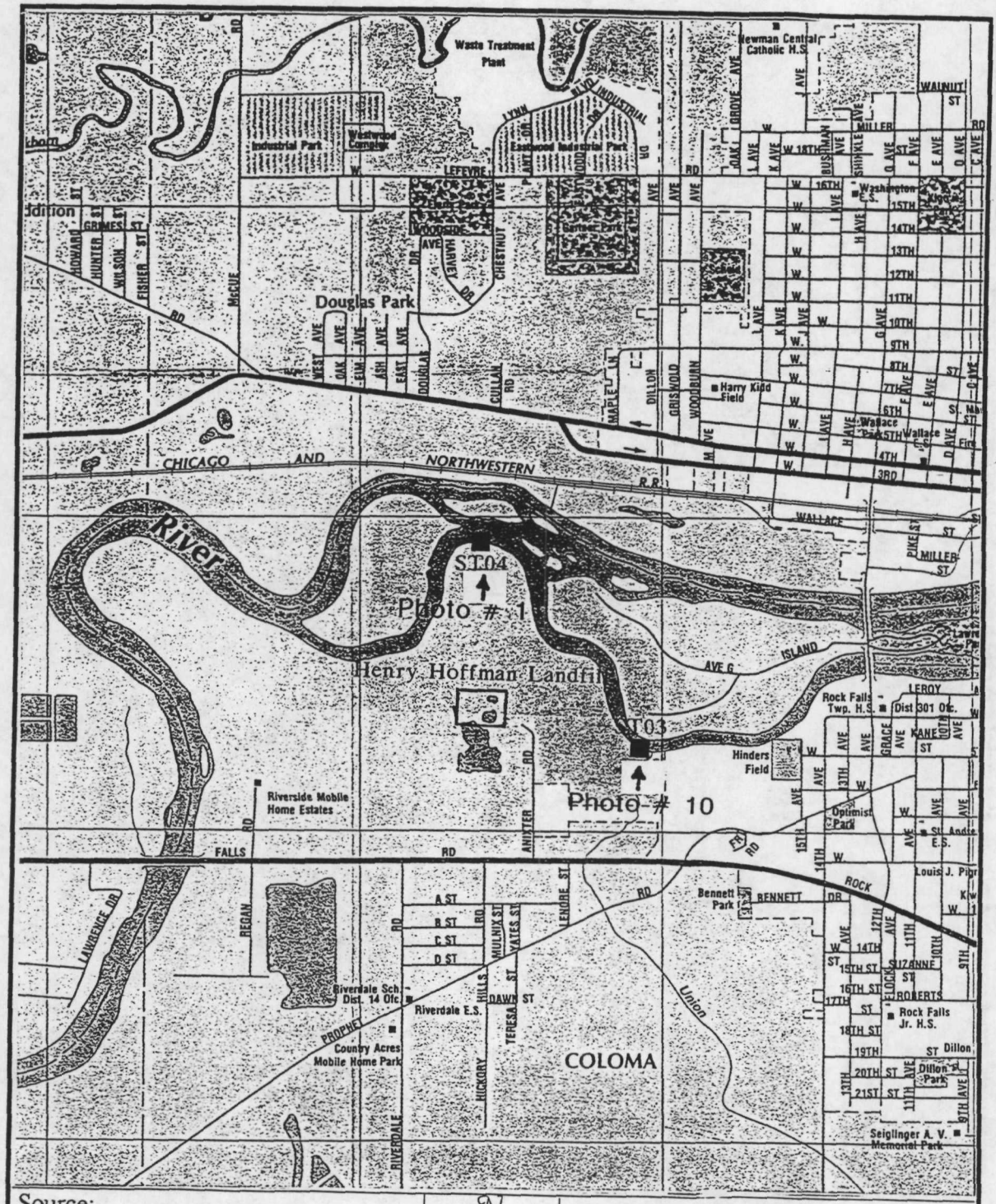
Henry Hoffman Landfill

Site Photographs



Source: IEPA 1991	N	Figure E-1 Photo Location Map
Scale: Not to scale		Henry Hoffman Landfill Rock Falls, Illinois

FRE00162
9.23.94



Source: Spectrum, 1988	N	Figure E-2 Offsite Photo Location Map
Scale: 2.25 inches = 1 mile		Henry Hoffman Landfill Rock Falls, Illinois

FRE00161

Date: 5/25/93

Time: 0955

Photo Taken By: J. J. Noyes

Photo Number: 1

Location: Henry Hoffman Landfill

Direction of Photo: Northeast

Description: View of fill area and northern shore of onsite pond. Note rip rap and fill material exposed along edge of pond.

Date: 5/25/93

Time: 0958

Photo Taken By: J. J. Noyes

Photo Number: 2

Location: Henry Hoffman Landfill

Direction of Photo: Northeast

Description: View of site and old fill areas.

Date: 5/25/93

Time: 0958

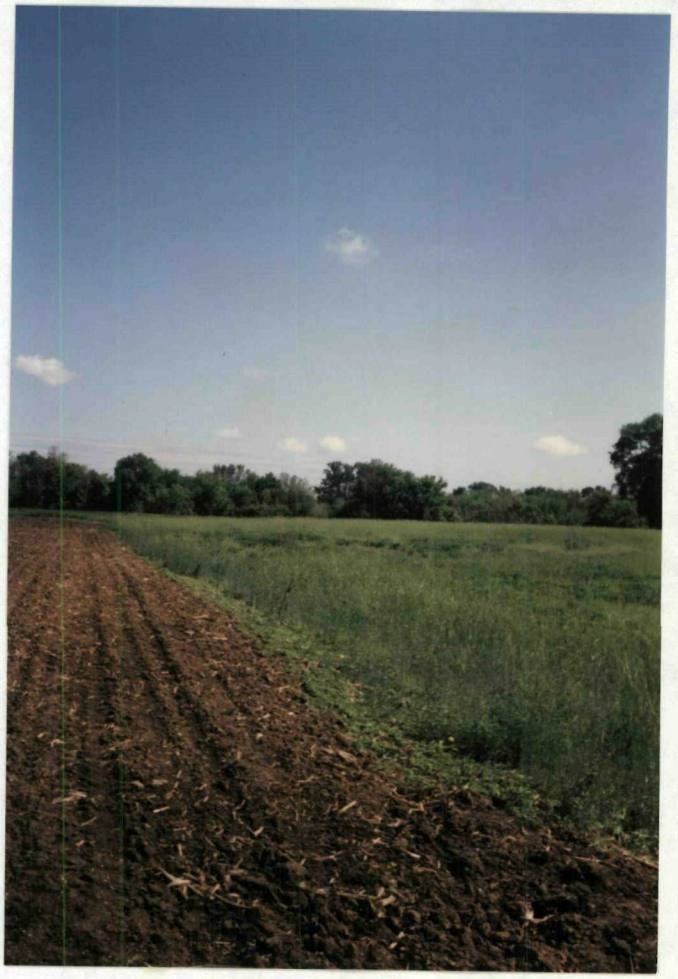
Photo Taken By: J. J. Noyes

Photo Number: 3

Location: Henry Hoffman Landfill

Direction of Photo: North

Description: End of fill along west border and where farm fields begin.



Date: 5/25/93

Time: 1002

Photo Taken By: J. J. Noyes

Photo Number: 4

Location: Henry Hoffman Landfill

Direction of Photo: East

Description: View of site and old fill areas facing east. Note vertical tanks in background on Associated Asphalts' property.

Date: 5/25/93

Time: 1013

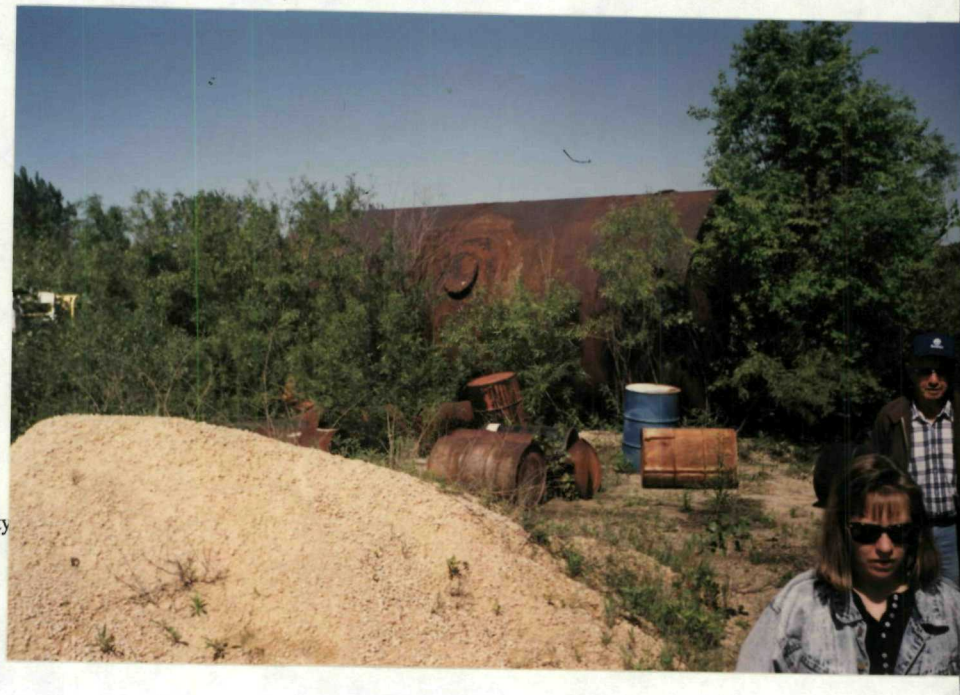
Photo Taken By: J. J. Noyes

Photo Number: 5

Location: Henry Hoffman Landfill

Direction of Photo: Southwest

Description: Scattered drums and tanks strewn about on Associated Asphalts' property along Henry Hoffman Landfill's east border.



Date: 5/25/93

Time: 1013

Photo Taken By: J. J. Noyes

Photo Number: 6

Location: Henry Hoffman Landfill

Direction of Photo: Southwest

Description: Leaking drums on Associated Asphalts' property along landfill's east border.

Date: 5/25/93

Time: 1013

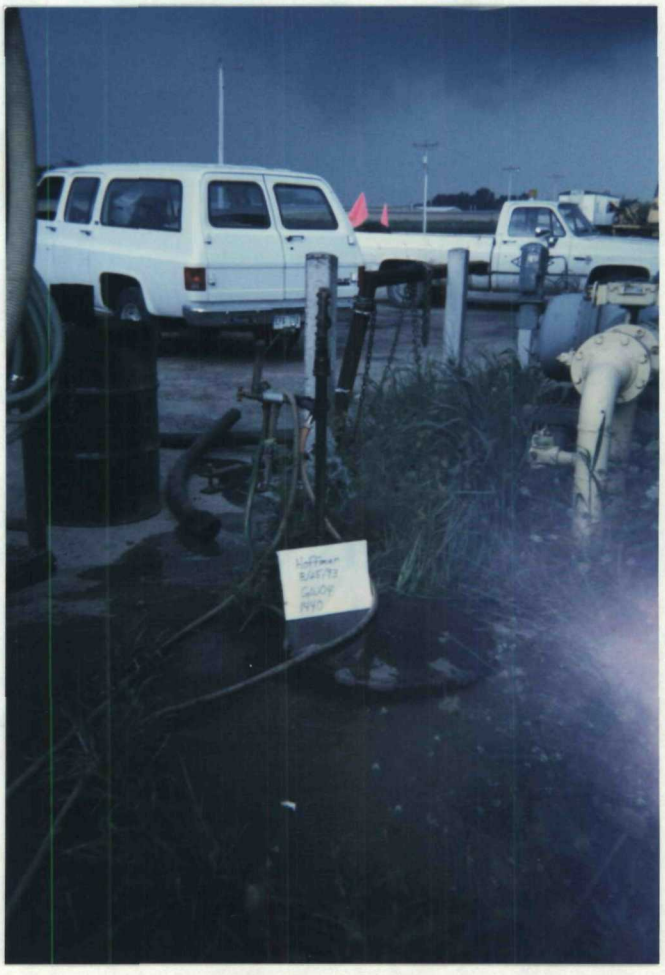
Photo Taken By: J. J. Noyes

Photo Number: 7

Location: Henry Hoffman Landfill

Direction of Photo: Southwest

Description: Storage tanks strewn about on Associated Asphalts' property along landfill's east border.



Date: 8/25/93

Time: 1430

Photo Taken By: J. J. Noyes

Photo Number: 8

Location: Henry Hoffman Landfill

Direction of Photo: South

Description: Location of GW04. Sandpoint well at Associated Asphalt.

Date: 8/26/93

Time: 1215

Photo Taken By: J. J. Noyes

Photo Number: 9

Location: Henry Hoffman Landfill

Direction of Photo: South

Description: Top of bank along northern shore of onsite pond. Location of ST01.

Date: 8/26/93

Time: 1000

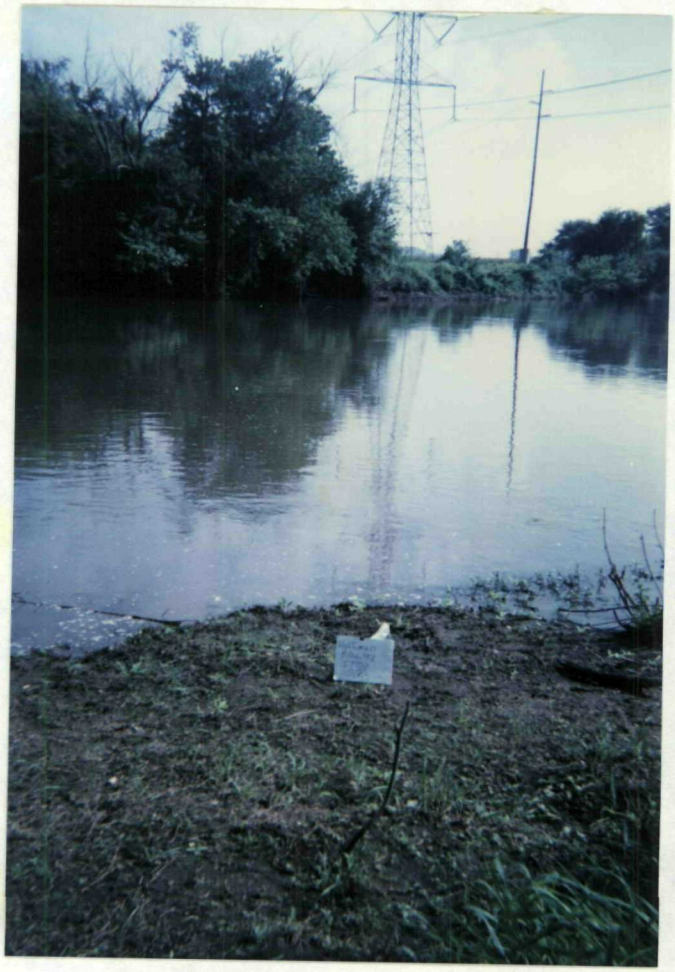
Photo Taken By: J. J. Noyes

Photo Number: 10

Location: Henry Hoffman Landfill

Direction of Photo: North

Description: Location of ST03 on Rock River.



Date: 8/26/93

Time: 1040

Photo Taken By: J. J. Noyes

Photo Number: 11

Location: Henry Hoffman Landfill

Direction of Photo: North

Description: Location of ST04 on Rock River.

Date: 8/24/93

Time: 1002

Photo Taken By: J. M. Albano

Photo Number: 12

Location: Henry Hoffman Landfill

Direction of Photo: Southwest

Description: SS01 sample location.

Date: 8/24/93

Time: 1010

Photo Taken By: J. M. Albano

Photo Number: 13

Location: Henry Hoffman Landfill

Direction of Photo: West

Description: SS02 sample location.

Date: 8/24/93

Time: 0945

Photo Taken By: J. M. Albano

Photo Number: 14

Location: Henry Hoffman Landfill

Direction of Photo: West

Description: SS03 sample location.

Date: 8/24/93

Time: 0950

Photo Taken By: J. M. Albano

Photo Number: 15

Location: Henry Hoffman Landfill

Direction of Photo: West

Description: SS04 sample location.

Date: 8/24/93

Time: 0952

Photo Taken By: J. M. Albano

Photo Number: 16

Location: Henry Hoffman Landfill

Direction of Photo: West

Description: SS05 sample location.

Date: 8/24/93

Time: 1020

Photo Taken By: J. M. Albano

Photo Number: 17

Location: Henry Hoffman Landfill

Direction of Photo: West

Description: SS06 sample location.

Appendix F

Henry Hoffman Landfill

Representative Well Logs

Illinois Environmental Protection Agency

Well Completion Report

Site #: 1958130002 County WHITESIDE Well # G101

Site Name: HOFFMAN LANDFILL Grid Coordinate: Northing _____ Easting _____

Drilling Contractor: TESTING ENGINEERS, INC. Date Drilled Start: 8-17-89

Driller: PATRICK J. HARMON Geologist: JEFFREY L. MARTIN Date Completed: 8-17-89

Drilling Method: HOLLOW STEM AUGERS Drilling Fluids (type): NONE

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: CEMENT/BENTONITE GROUT

Amount of cement: # of bags 6.0 lbs. per bag 94/cu. yd.

Amount of bentonite: # of bags 1.2 lbs. per bag 50/cu. yd.

Type of Bentonite Seal (Granular, Pellet): PELLET

Amount of bentonite: # of Bags 0.5 lbs. per bag 50

Type of Sand Pack: CAVE-IN

Source of Sand: CAVE-IN

Amount of Sand: # of bags _____ lbs. per bag _____

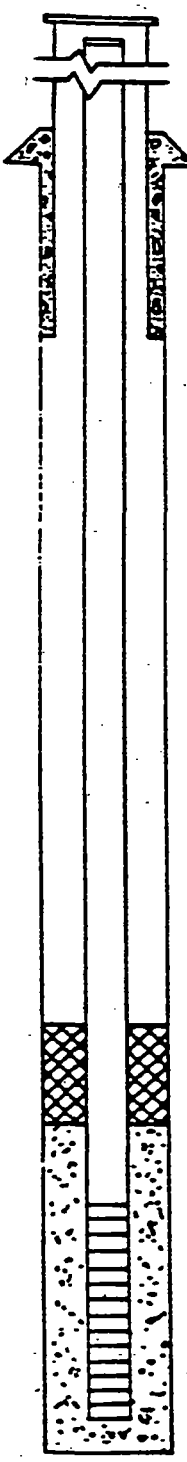
Well Construction Materials

	Stainless Steel Specify Type	Teflon Specify Type	PVC Specify Type	Other Specify Type
Riser coupling joint			Tri-Loc	
Riser pipe above w.t.			Tri-Loc	
Riser pipe below w.t.			Tri-Loc	
Screen			Tri-Loc	
Coupling joint screen to riser			Tri-Loc	
Protective casing				Steel

Measurements

to .01 ft. (where applicable)

Riser pipe length	28.08
Protective casing length	5.0
Screen length	5.0
Bottom of screen to end cap	0.5
Top of screen to first joint	0.0
Total length of casing	5.0
Screen slot size	0.010"
# of openings in screen	
Diameter of borehole (in)	7
Diameter of riser pipe (in)	2



Elevations — .01 ft.

639.71 MSL Top of Protective Casing

639.71 MSL Top of Riser Pipe

3.08 ft. Casing Stickup

636.63 MSL Ground Surface

6.58 ft. Top of annular sealant

630.05 ft. Top of Seal

2.42 ft. Total Seal Interval

627.63 ft. Top of Sand

616.75 ft. Top of Screen

5.0 ft. Total Screen Interval

611.75 ft. Bottom of Screen

610.13 ft. Bottom of Borehole

Completed by: JEFFREY MARTIN Surveyed by: Bernard H Klingenberg Ill. registration # 2755

MONITORING WELL DATA

MONITORING WELL NO. G101
HOFFMAN LANDFILL
SITE #1958130002
WHITESIDE COUNTY, ILLINOIS
AUGUST, 1989

LENGTH OF SCREENED SECTION	5.0	FT.
TIP AT ELEVATION	611.75	
TOTAL LENGTH OF RISER PIPE & SCREEN	27.96	FT.
TOP OF PIPE ELEVATION	639.71	
TOP OF CASING ELEVATION	639.71	
CASING STICKUP ABOVE GROUND.	3.08	FT.

SUMMARY OF WATER LEVEL MEASUREMENT

	WATER ELEVATION	DATE
WHILE DRILLING	613.63	8-17-89
ON COMPLETION	613.73	8-17-89
AFTER BAILING (DEVELOPMENT)	611.75	8-18-89
AFTER 0.5 HOURS	614.04	8-18-89
AFTER ____ DAYS		
AFTER ____ DAYS		
AFTER ____ DAYS		
AFTER ____ DAYS		
AFTER ____ DAYS		
AFTER ____ DAYS		
AFTER ____ DAYS		

testing engineers, inc.
1417 CHICAGO AVENUE P.O. BOX 548 DIXON, ILLINOIS 61021 PHONE (815) 288-1489
57 AIRPORT DRIVE ROCKFORD, ILLINOIS 61109 PHONE (815) 964-8030
FOUNDATION BORINGS AND REPORTS
MATERIAL TESTING AND REPORTS
SOIL SURVEYS AND ANALYSIS

LOG OF BORING NO. G101

PROJECT HOFFMAN LANDFILL; 1958130002 - WHITESIDE COUNTY JOB NO. 2401

OWNER HENRY HOFFMAN ORDER NO.

ARCHITECT-ENGINEER WILLETT, HOFMANN & ASSOCIATES, INC.

LOCATION 173'S., 454'E. OF NW CORNER OF SW 1/4 OF SEC. 29, T. 21N., R. 7E. OF THE 4TH P.M., WHITESIDE COUNTY, ILLINOIS

DATUM U.S.G.S.

ELEV.	SOIL DESCRIPTION	DEPTH	SAMPLE NO.	SAMPLE TYPE	DIST.	REC.	N	γ	Q_u	w%
636.6	Dark brown SILTY SAND	0.0								
635.1	Brown SAND, trace silt, some fine gravel	1.5								
632.1	Very stiff dark brown and brown SANDY CLAYEY SILT, trace gravel	4.5	1	SS	X	X	10		2.2 P	15.6
629.1	Stiff gray and brown SANDY SILTY CLAY	7.5								
		10	2	SS	X	X	7		1.1 P	22.8
624.6		12.0								
	Very stiff brown SILTY CLAY, trace sand	15	3	SS	X	X	11		2.2 P	18.4
617.6		19.0								
	Stiff brown and dark gray ORGANIC SILTY CLAY, trace sand		4	SS	X	X	7		1.4 P	38.2
613.6		23.0								
	Loose gray medium and coarse SAND and fine and medium GRAVEL	25	5	SS	X		7			
610.1		26.5								
	END OF BORING									

Drilled By PJH Checked JLM
Inspector
Boring Started 8-17-89
Boring Completed 8-17-89
Sheet 1 of 1 Sheets

TEI-2

WATER LEVELS
While Drilling -23.0' (613.6)
On Completion -22.9' (613.7)
After 5 Hours -22.4' (614.2)
After 24 Hours -21.2' (615.4)

Illinois Environmental Protection Agency — Well Completion Report

Site #: 1958130002 County: WHITESIDE Well #: G102

Site Name: HOFFMAN LANDFILL Grid Coordinate: Northing _____ Easting _____

Drilling Contractor: TESTING ENGINEERS, INC. Date Drilled Start: 8-17-89

Driller: PATRICK J. HARMON Geologist: JEFFREY L. MARTIN Date Completed: 8-17-89

Drilling Method: HOLLOW STEM AUGERS Drilling Fluids (type): NONE

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: CEMENT/BENTONITE GROUT

Amount of cement: # of bags 6.0 lbs. per bag 94/cu. yd.

Amount of bentonite: # of bags 1.2 lbs. per bag 50/cu. yd.

Type of Bentonite Seal (Granular, Pellet): PELLET

Amount of bentonite: # of Bags 0.5 lbs. per bag 50

Type of Sand Pack: CAVE-IN

Source of Sand: CAVE-IN

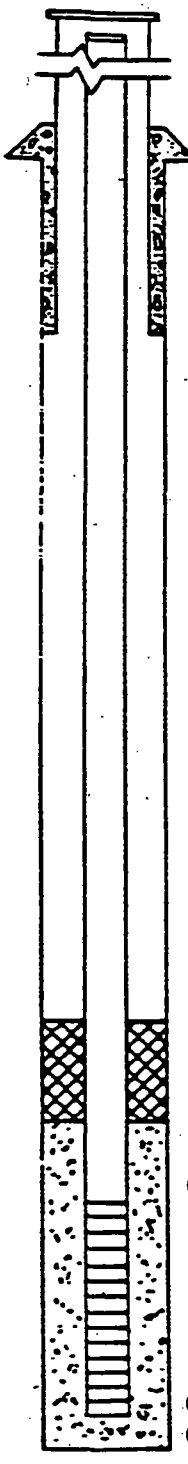
Amount of Sand: # of bags _____ lbs. per bag _____

Well Construction Materials

	Stainless Steel Specify Type	Teflon Specify Type	PVC Specify Type	Other Specify Type
Riser coupling joint			Tri-Loc	
Riser pipe above w.t.			Tri-Loc	
Riser pipe below w.t.			Tri-Loc	
Screen			Tri-Loc	
Coupling joint screen to riser			Tri-Loc	
Protective casing				Steel

Measurements to .01 ft. (where applicable)

Riser pipe length	27.67
Protective casing length	5.0
Screen length	5.0
Bottom of screen to end cap	0.5
Top of screen to first joint	0.0
Total length of casing	5.0
Screen slot size	0.010"
# of openings in screen	
Diameter of borehole (in)	7
ID of riser pipe (in)	2



Elevations — .01 ft.

639.05 MSL Top of Protective Casing

639.05 MSL Top of Riser Pipe

2.75 ft. Casing Stickup

636.30 MSL Ground Surface

14.75 ft. Top of annular sealant

621.55 ft. Top of Seal

2.17 ft. Total Seal Interval

619.38 ft. Top of Sand

616.80 ft. Top of Screen

5.0 ft. Total Screen Interval

611.80 ft. Bottom of Screen

609.80 ft. Bottom of Borehole

Completed by: JEFFREY L. MARTIN Surveyed by: Bernard N Klingenberg Ill. registration # 2755

MONITORING WELL DATA

MONITORING WELL NO. G102
HOFFMAN LANDFILL
SITE #1958130002
WHITESIDE COUNTY, ILLINOIS
AUGUST, 1989

LENGTH OF SCREENED SECTION	5.0	FT.
TIP AT ELEVATION	611.80	
TOTAL LENGTH OF RISER PIPE & SCREEN	27.25	FT.
TOP OF PIPE ELEVATION	639.05	
TOP OF CASING ELEVATION	639.05	
CASING STICKUP ABOVE GROUND.	2.75	FT.

SUMMARY OF WATER LEVEL MEASUREMENT

	WATER ELEVATION	DATE
WHILE DRILLING	612.30	8-17-89
ON COMPLETION	613.80	8-17-89
AFTER BAILING (DEVELOPMENT)	614.30	8-18-89
AFTER____HOURS		
AFTER____DAYS		
AFTER____DAYS		
AFTER____DAYS		
AFTER____DAYS		
AFTER____DAYS		
AFTER____DAYS		
AFTER____DAYS		

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57 AIRPORT DRIVE ROCKFORD, ILLINOIS 61109 PHONE (815) 964-8030
FOUNDATION BORINGS AND REPORTS
MATERIAL TESTING AND REPORTS
SOIL SURVEYS AND ANALYSIS

LOG OF BORING NO. G102

PROJECT HOFFMAN LANDFILL; 1958130002 - WHITESIDE COUNTY JOB NO. 2401

OWNER HENRY HOFFMAN ORDER NO.

ARCHITECT-ENGINEER WILLETT, HOFMANN & ASSOCIATES, INC.

LOCATION 101'S., 585'W. OF NE CORNER OF SE 1/4 OF SEC. 30, T. 21N., R. 7E. OF THE 4th P.M., WHITESIDE COUNTY, ILLINOIS

DATUM U.S.G.S.

ELEV.	SOIL DESCRIPTION	DEPTH	SAMPLE NO.	SAMPLE TYPE	DIST. REC.	N	γ	Q_u	w%
636.3	Dark brown CLAYEY SILT, trace sand	0.0							
634.8	SEE NOTE 1	1.5							
633.3	Brown GRAVELLY SANDY CLAY	3.0							
632.3		4.0	1	SS	⊠	13			
	Medium to dense light brown medium and coarse SAND and GRAVEL	10	2	SS	⊠	35			
		15	3	SS	⊠	25			
616.8		19.5	4	SS	⊠	29			
	Medium fine and medium SAND, trace to some gravel								
609.8		26.5	5	SS	⊠	27			
	END OF BORING								

Drilled By PJH Checked JLM
Inspector
Boring Started 8-17-89
Boring Completed 8-17-89
Sheet 1 of 1 Sheets

TEI-2

WATER LEVELS
While Drilling -24.0' (612.3)
On Completion -22.5' (613.8)
After 24 Hours -21.8' (614.5)
After ___ Hours

Illinois Environmental Protection Agency — **Well Completion Report**

Site #: 1958130002 County WHITESIDE Well # G103

Site Name: HOFFMAN LANDFILL Grid Coordinate: Northing _____ Easting _____

Drilling Contractor: TESTING ENGINEERS, INC. Date Drilled Start: 8-17-89

Driller: PATRICK J. HARMON Geologist: JEFFREY L. MARTIN Date Completed: 8-17-89

Drilling Method: HOLLOW STEM AUGERS Drilling Fluids (type): NONE

Annular Space Details

Type of Surface Seal: CONCRETE

Type of Annular Sealant: CEMENT/BENTONITE GROUT

Amount of cement: # of bags 6.0 lbs. per bag 94/cu. yd.

Amount of bentonite: # of bags 1.2 lbs. per bag 50/cu. yd.

Type of Bentonite Seal (Granular, Pellet): PELLET

Amount of bentonite: # of Bags 0.5 lbs. per bag 50

Type of Sand Pack: CAVE-IN

Source of Sand: CAVE-IN

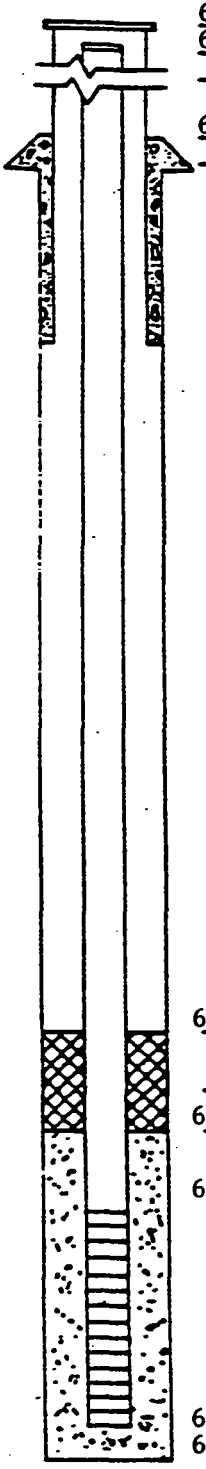
Amount of Sand: # of bags _____ lbs. per bag _____

Well Construction Materials

	Stainless Steel Specify Type	Teflon Specify Type	PVC Specify Type	Other Specify Type
Riser coupling joint			Tri-Loc	
Riser pipe above w.t.			Tri-Loc	
Riser pipe below w.t.			Tri-Loc	
Screen			Tri-Loc	
Coupling joint screen to riser			Tri-Loc	
Protective casing				Steel

Measurements to .01 ft. (where applicable)

Riser pipe length	29.75
Protective casing length	5.0
Screen length	5.0
Bottom of screen to end cap	0.5
Top of screen to first joint	0.0
Total length of casing	5.0
Screen slot size	0.010"
# of openings in screen	
Diameter of borehole (in)	7
ID of riser pipe (in)	2



Elevations — .01 ft.

640.41 MSL Top of Protective Casing

640.41 MSL Top of Riser Pipe

2.75 ft. Casing Stickup

637.66 MSL Ground Surface

16.25 ft. Top of annular sealant

621.41 ft. Top of Seal

2.08 ft. Total Seal Interval

619.33 ft. Top of Sand

616.16 ft. Top of Screen

5.0 ft. Total Screen Interval

611.11 ft. Bottom of Screen

608.66 ft. Bottom of Borehole

Completed by: JEFFREY L. MARTIN Surveyed by: Bernard H Klingenberg Ill. registration # 2755

MONITORING WELL DATA

MONITORING WELL NO. G103
HOFFMAN LANDFILL
SITE #1958130002
WHITESIDE COUNTY, ILLINOIS
AUGUST, 1989

LENGTH OF SCREENED SECTION	5.0	FT.
TIP AT ELEVATION	610.66	
TOTAL LENGTH OF RISER PIPE & SCREEN	29.25	FT.
TOP OF PIPE ELEVATION	640.41	
TOP OF CASING ELEVATION	640.41	
CASING STICKUP ABOVE GROUND.	2.75	FT.

SUMMARY OF WATER LEVEL MEASUREMENT

	WATER ELEVATION	DATE
WHILE DRILLING	613.66	8-17-89
ON COMPLETION	614.58	8-17-89
AFTER BAILING (DEVELOPMENT)	614.74	8-18-89
AFTER____HOURS		
AFTER____DAYS		
AFTER____DAYS		
AFTER____DAYS		
AFTER____DAYS		
AFTER____DAYS		
AFTER____DAYS		
AFTER____DAYS		

testing engineers, inc.
1417 CHICAGO AVENUE P.O. BOX 548 DIXON, ILLINOIS 61021 PHONE (815) 288-1489
67 AIRPORT DRIVE ROCKFORD, ILLINOIS 61109 PHONE (815) 964-8030
FOUNDATION BORINGS AND REPORTS
MATERIAL TESTING AND REPORTS
SOIL SURVEYS AND ANALYSIS

LOG OF BORING NO. G103

PROJECT HOFFMAN LANDFILL; 1958130002 - WHITESIDE COUNTY JOB NO. 2401

OWNER HENRY HOFFMAN ORDER NO.

ARCHITECT-ENGINEER WILLETT, HOFMANN & ASSOCIATES, INC.

LOCATION 504'S., 585'W. OF NE CORNER OF SE 1/4 OF SEC. 30, T. 21N., R. 7E. OF THE 4TH P.M., WHITESIDE COUNTY

DATUM U.S.G.S.

ELEV.	SOIL DESCRIPTION	DEPTH	SAMPLE NO.	SAMPLE TYPE	DIST. REC.	N	γ	Q_u	w%
637.7	Brown medium and coarse SAND and GRAVEL	0.0							
635.2	Dark brown GRAVELLY CLAYEY SAND	2.5							
633.2	Medium brown fine and medium SAND, trace gravel	4.5	1	SS		13			
629.7	Medium light brown medium and coarse SAND and GRAVEL	8.0							
		10	2	SS		18			
623.2	Medium brown SAND, some fine and medium gravel	14.5	3	SS		27			
617.7	Medium brown SAND and GRAVEL	20.0	4	SS		26			
		25	5	SS		22			
608.7	END OF BORING	29.0	6	SS		28			

Drilled By PJH Checked JLM
Inspector
Boring Started 8-17-89
Boring Completed 8-17-89

WATER LEVELS
While Drilling -24.0' (613.7)
On Completion -23.1' (614.6)
After 24 Hours -23.0 (614.7)
After Hours

Reference Number 1

Illinois State Geological Survey
Urbana, Illinois
Russell, Burdsall and Ward #1
— Rock Falls —

R 7E, T 21 N, Sec. 27
Whiteside Co.

Elevation: 625 E.T.M.
Drilled: 1960 by Layne Western Co.

Sample Set No. 35189
Studied 3/60 by Frank J. Wobber

System	Formation	Thickness	Bed	Depth	Description	Remarks
		15	15	15	Fill	20" O.D. csg.
SILURIAN		110	45	60	Dolomite, cherty, buff to white	
			35	95	Dolomite, white, fine to medium	90' Static Water Level
			20	115	Dolomite, cherty, white	
			10	125	Dolomite, silty, green	
ORDOVICIAN SYSTEM	Maquoketa	190	65	190	Shale, green to greenish-gray, weak; dolomite, buff to gray	16" O.D. csg.
			80	270	Dolomite, gray to white, fine to medium; shale, green, weak	19¾" hole
			45	315	Shale, gray to brown, weak; little dolomite	3..
	Galena	225	40	355	Dolomite, buff, fine, little medium	
			110	465	Dolomite, buff to white, fine to medium; little dolomite, silty, buff to gray	
			75	540	Dolomite, cherty, buff	
	Decorah	50	20	560	Dolomite, buff, gray, speckled	
			30	590	Dolomite, buff, brown, speckled (red), trace shale partings	15¼" hole
	Platteville	95	30	620	Dolomite, cherty, buff, little gray, fine	
			45	665	Dolomite, buff to gray, fine, mottled	
	Glenwood	75	20	685	Dolomite, sandy, gray; shale	
			10	695	Shale, green; sandstone, medium	
			55	750	Sandstone, slight dolomitic, fine to medium, little coarse	

		110			Sandstone, fine to medium, incoherent	
	St. Peter	185	860			
		15	875		Sandstone, medium, little fine	877'
		10	885		Sandstone, fine; shale, red, tough	
		50	935		Shale, red, green, weak; little sandstone	12" I.D. csg.
		25	960		Dolomite, sandy, white, buff, fine	951.7'
	Shakopee	175	1050		Dolomite, cherty, white to gray, fine	
		60	1110		Dolomite, cherty, buff, fine	
	New Richmond	15	1125		Dolomite, sandy, cherty, buff to white	
		15	1140		Dolomite, cherty, buff, white, fine	
	Oneota	75	1200		Dolomite, very sandy, white, pinkish-buff, fine to medium	
		75	1275		Dolomite, buff to white; fine	12" hole
CAMBRIAN SYSTEM	Trempealeau	120	1320		Dolomite, glauconitic, buff to white, fine	
		25	1345		Dolomite, silty, glauconitic, buff, red; little shale	
		10	1355		Shale, glauconitic, green to gray, weak	
	Franconia	110	1430		Sandstone, dolomitic, glauconitic, greenish-gray, fine to very fine	
		80	1510		Sandstone, white, fine to coarse	
	Ironton-Galesville	115	1520		Sandstone, dolomitic, fine to medium	
			1535		Sandstone, dolomitic, fine to very fine	
			1545		"Sand, gray"	
	au Claire	7	1552		"Shale"	T.D.

Illinois State Geological Survey
Urbana, Illinois
NORTHWESTERN STEEL & WIRE CO., WELL #1

T 21 N — Whiteside

707-1636 Drilled by J.P. Miller 8-15-52

Elevation: 625' Estimate Topo. Map ?
Sample Set No. [illegible]
Drilled 1952 by Allabaugh Well Company
Studied 1952 by J.W. Baxter

System	Formation	Thickness	Thickness	Depth	Description	
		20	20	20	Fill clay; gravel on top	12" 10 ... 25
SILURIAN	NIAGARAN	65	65	85	Dolomite, white to yellowish orange	50 static level
SILURIAN	ALEXANDRIAN	73	73	158	Dolomite, cherty, white to light gray	12" hole
	MAQUOKETA	197	67	225	Shale, greenish gray, weak	8"
			57	282	Dolomite, dark gray to greenish gray	
			58	340	Shale, greenish gray, weak	
			15	355	Shale, brownish gray; dolomite	372
ORDOVICIAN	GALENA	213	110	465	Dolomite, pale brownish gray	
			70	535	Dolomite, cherty, pale brownish gray	
			33	568	Dolomite, pale brownish gray	6 hole
	ION	27	27	595	Dolomite, cherty, gray; shale	
	GUTTENBERG	5	5	600	Dolomite, cherty, yellowish brown	
	PLATTVILLE	120	70	670	Dolomite, cherty, grayish brown	
			50	720	Dolomite, brownish gray; sandy at bottom	700
	GLENWOOD	35	35	755	Sandstone, white; shale; dolomite	6" 10

		15	800		Dolomite, sandy, reddish brown
	SHAKOPEE 155	50	850		Dolomite, cherty, brownish gray
		30	880		Dolomite, cherty, sandy, brownish gray
		40	920		Dolomite, cherty, brown
	NEW RICHMOND 35	35	955		Sandstone, light gray; dolomite
	ONEOTA 185	135	1090		Dolomite, cherty, light gray
		50	1140		Dolomite, cherty, pale brownish gray
	GUNTER 35	25	1165		Chert, white; sandstone
		10	1175		Sandstone, white
CAMBRIAN	TREMPEALEAU 168	70	1245		Dolomite, sandy, light gray
		98	1343		Dolomite, pale brownish gray
	FRANCONIA 94	12	1355		Dolomite, yellowish brown, sandy
		10	1365		Sandstone, light green
		45	1410		Shale, greenish gray
		27	1437		Sandstone, light greenish gray; dolomite; shale
	IRONTON 83	83	1520		Sandstone, light gray, coarse; shale
	GALESVILLE 74	74	1594		Sandstone, light gray, fine
	EAU CLAIRE 42	16	1610		Shale, dark greenish gray
		25	1636		Sandstone, pale brownish gray

1382'

6" I.D. pipe

1452'

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam. 16 in. Depth 1643 ft.
   Curb material_____. Buried Slab: Yes_____ No_____
   b. Driven X. Drive Pipe Diam._____ in. Depth_____ ft.
   c. Drilled_____. Finished in Drift_____. In Rock X.
   Tubular_____. Gravel Packed_____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
309 bags	0	844

2. Distance to Nearest:
   Building 10+ Ft. — Seepage Tile Field 75+
   Cess Pool_____ — Sewer (non Cast Iron)_____
   Privy_____ — Sewer (Cast Iron)_____
   Septic Tank 50+ — Barnyard_____
   Leaching Pit_____ — Manure Pile_____
3. Well furnishes water for human consumption? Yes X No____
4. Date well completed 8-1-80
5. Permanent Pump Installed? Yes____ Date_____ No X
   Manufacturer_____ Type_____ Location_____
   Capacity_____ gpm. Depth of Setting_____ Ft.
6. Well Top Sealed? Yes X No____ Type_____
7. Pitless Adapter Installed? Yes____ No X
   Manufacturer_____ Model Number_____
   How attached to casing?_____
8. Well Disinfected? Yes X No____
9. Pump and Equipment Disinfected? Yes____ No____
10. Pressure Tank Size____ gal. Type_____
    Location_____
11. Water Sample Submitted? Yes____ No X

REMARKS: Not shot

215096 SpMnF

Data	Loc.	Test	D	P	W	C	

IDPH 4.0[illegible]
1/7 1 1

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Well 2, Plant 3

10. Property owner Northwestern Steel & Wire Well No._____
    Address 121 Wallace St. Sterling, IL
    Driller Richard H. Wehling License No. 102-223
11. Permit No. 94622 Date 6-30-80
12. Water from_____ (Formation)
    at depth____ to____ ft.
13. County Whiteside
    Sec. 29 NW
    Twp. 21N
    Rge. 7E
    Elev._____
14. Screen: Diam._____ in.
    Length:____ ft. Slot_____
    460'S 510'W NE corner
15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
16	Black steel	+1	30
12 3/4	" " cemented	+1	844
10 3/4	" "	1318	1458

SHOW LOCATION IN SECTION PLAT
460's 510'W NE/c
(industrial)

16. Size Hole below casing: 15 3/4 in.
17. Static level 87 ft. below casing top which is 1½ ft. above ground level. Pumping level 291 ft. when pumping at 823 gpm for 24 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Lime	45	45
Yellow Lime	20	65
Lime	35	100
Yellow Lime	10	110
White Lime	10	110
Lime	50	160
Shale	85	245
Shale w/ Lime	45	290
Shale	75	365
Lime	355	720
Shale	20	740
Sand & Shale	10	750
Shale Red w/ sand	70	820
Shale Red w/ lime	10	830
Lime	20	850

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

Cont'd on back

SIGNED Richard H. Wehling DATE 8-7-80
WEHLING WELL WORKS, INC.

Filed 1-30-81

Rock Falls
Whiteside County

(23710—50M—9-60)

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Black sandy top soil		0	3
Fine yellow sand		3	10
Gray fine to coarse sand and gravel		10	28
Fine yellow sand		28	32
Fine gray coarse sand, some gravel and small boulders		32	47
Fine gray sand, some small boulders and clay balls		47	54
Soft gray clay		54	60
Fine to coarse gray sand, some small gravel		60	67
Coarse sand, gravel and boulders, some fine sand.		67	69.5
Broken yellow limestone		69.5	70.5
			TD
Casing: 29'9" -16"; 3/8" thick steel with welded joints from +2 to 279"			
7' - 16"; 3/8" steel with welded joints from 52'9" -to- 59'9"			
22' - 26"; 3/8" thick steel with welded joints from +2' to 20'			
Screen Record: Type Layne shutter			
25' - 16" with #7 opening, bronze with welded joints from 27'9" to 52'9"			
10' - 16" with #7 opening, bronze with welded joints from 59'9" to 69'9"			
Type of seal at Bottom - Steel plate			

COMPANY Layne-Western Company
FARM Rock Falls NO. 3
DATE DRILLED October 1961 COUNTY NO. 133
AUTHORITY Layne-Western Company
ELEVATION
LOCATION 3138'N line , 2128'W line of section
COUNTY WHITESIDE

33-21N-7E

Layne-Western Company Rock Falls #3
COUNTY WHITESIDE 33-21N-7E

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Hole Record: 52" from 0 to 10' 36" from 10' - 69'9" Gravel Pack Record: 29.8 gallons #2 size from +2 to 69'9" Cementing Record: Annular space between 36" hole and 26" casing grouted from ground surface to 18'. Back fill Record: 2' of sand on out- side of 26" casing from 18' to 20'. Well Test Data: Static Level 13' pumping level 28 after 20 hours pumping at 1251 gallons per minute Length of test 21 hours.			

Layne-Western Company — Rock Falls #3

COUNTY WHITESIDE — 33-21N-7E

Yellow Copy — Well Contractor
Blue Copy — Well Owner

DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62... DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam. 6 in. Depth 302 ft.
   Curb material _____. Buried Slab: Yes____ No____
   b. Driven _____. Drive Pipe Diam. _____in. Depth _____ft.
   c. Drilled x. Finished in Drift _____. In Rock x.
   Tubular _____. Gravel Packed _____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Clay	0	130

2. Distance to Nearest:
   Building 40 Ft. — Seepage Tile Field 200
   Cess Pool _____ — Sewer (non Cast iron) _____
   Privy _____ — Sewer (Cast iron) _____
   Septic Tank 100 — Barnyard _____
   Leaching Pit _____ — Manure Pile _____
3. Well furnishes water for human consumption? Yes x No____
4. Date well completed DEC 18, 81
5. Permanent Pump Installed? Yes____ Date _____ No x
   Manufacturer _____ Type _____ Location _____
   Capacity _____ gpm. Depth of Setting _____ Ft.
6. Well Top Sealed? Yes x No____ Type _____
7. Pitless Adapter Installed? Yes____ No x
   Manufacturer _____ Model Number _____
   How attached to casing? _____
8. Well Disinfected? Yes x No____
9. Pump and Equipment Disinfected? Yes____ No____
10. Pressure Tank Size____ gal. Type _____
    Location _____
11. Water Sample Submitted? Yes____ No X

REMARKS:
We do not put in small pumps

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Sterling Co-Op Well No. _____
    Address 17150 Pennington Rd, Sterling, Il.
    Driller Glenn L. Lyons License No. #1
11. Permit No. 102281 Date Nov 30, 1981
12. Water from White limestone Formation
    at depth 105 to 302 ft.
13. County Whiteside
    Sec. 9 .29
    Twp. 21N
    Rge. 7E
    Elev. _____
14. Screen: Diam. _____ in.
    Length: _____ ft. Slot _____

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
6"	Steel T & C 19.45	0	130

SHOW LOCATION IN SECTION PLAT
140'S 125'E NW¼
SW NW NE
(industrial)

16. Size Hole below casing: 6 in.
17. Static level 65 ft. below casing top which is 2 ft. above ground level. Pumping level 250 ft. when pumping at 15 gpm for 2 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Top Soil	1	1
Yellow Clay	2	3
Sandy Clay Yellow	14	17
Gravel	19	36
Gravel and blue Clay	6	42
Blue Clay	63	105
White Limestone	197	302

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Glenn Lyons DATE 1-6-82

IDPH 4.065
1/74 — KNB-1
(71—12¼M Sets—6-74) 5

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam.____in. Depth____ft.
   Curb material____. Buried Slab: Yes____No____
   b. Driven____. Drive Pipe Diam.____in. Depth____ft.
   c. Drilled X. Finished in Drift____. In Rock X.
   Tubular____. Gravel Packed____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Bentonite	0	94'

2. Distance to Nearest:
   Building 60' Ft. — Seepage Tile Field 100'±
   Cess Pool None — Sewer (non Cast iron) 100'
   Privy None — Sewer (Cast iron) None
   Septic Tank 100'± — Barnyard None
   Leaching Pit None — Manure Pile None
3. Well furnishes water for human consumption? Yes Yes No____
4. Date well completed Dec 22 1988
5. Permanent Pump Installed? Yes____ Date____ No No
   Manufacturer____ Type____ Location____
   Capacity____gpm. Depth of Setting____Ft.
6. Well Top Sealed? Yes Yes No____ Type compression
7. Pitless Adapter Installed? Yes____ No No
   Manufacturer____ Model Number____
   How attached to casing?____
8. Well Disinfected? Yes Yes No____
9. Pump and Equipment Disinfected? Yes____ No____
10. Pressure Tank Size____gal. Type____
    Location____
11. Water Sample Submitted? Yes____ No No

REMARKS:
20
20
20
20
15'-8"
95'-8"

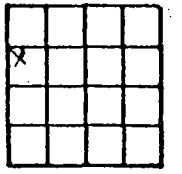
Well seal
Well packer
Clorine

Co. # 215

IDPH 5
1/74 – NB-1

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner____ Well No.____
    Address____
    Driller Jonas Martin License No. 092-003326
11. Permit No. 008013 Date 11-23-88
12. Water from Lime Stone (Formation) at depth 95 to 235 ft.
13. County Whiteside
    Sec. 5-8S
    Twp. 21N
    Rge. 7E
    Elev. 680



SHOW LOCATION IN SECTION PLAT
NW SW NW

14. Screen: Diam.____in.
    Length:____ft. Slot____
15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
6"	PVC		95'-8"

16. Size Hole below casing: 6 in.
17. Static level 80 ft. below casing top which is 1 ft. above ground level. Pumping level 100' ft. when pumping at 20 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Top Soil and Clay	15'	15'
Shale	73'	88'
Lime Stone (Gray)	147'	235'

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Jonas Martin DATE Dec 28-1988

A

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUEST AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ___. Bored ___. Hole Diam. ___ in. Depth ___ ft.
   Curb material ___. Buried Slab: Yes ___ No ___
   b. Driven ___. Drive Pipe Diam. ___ in. Depth ___ ft.
   c. Drilled X. Finished in Drift ___. In Rock X.
   Tubular ___. Gravel Packed ___.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Bentonite	+0	273'

2. Distance to Nearest:
   Building 40 Ft. Seepage Tile Field 100' +
   Cess Pool None Sewer (non Cast iron) 100' +
   Privy None Sewer (Cast iron) 100' +
   Septic Tank 100' + Barnyard None
   Leaching Pit None Manure Pile None
3. Well furnishes water for human consumption? Yes Yes No ___
4. Date well completed Feb 25, 1987
5. Permanent Pump Installed? Yes ___ Date ___ No No
   Manufacturer ___ Type ___ Location ___
   Capacity ___ gpm. Depth of Setting ___ Ft.
6. Well Top Sealed? Yes Yes No ___ Type ___
7. Pitless Adapter Installed? Yes ___ No No
   Manufacturer ___ Model Number ___
   How attached to casing? ___
8. Well Disinfected? Yes Yes No ___
9. Pump and Equipment Disinfected? Yes ___ No ___
10. Pressure Tank Size ___ gal. Type ___
    Location ___
11. Water Sample Submitted? Yes ___ No No

REMARKS: 21-4" 12 42 21 252 4 256 | 256 15-4" 2-9" 274-1" | St Permitt Shot Clorine | Co # 21399

IDPH 4.065
1/74 – NB-1

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner [illegible] Well No. ___
    Address ___
    Driller Jonas Martin License No. 92332
11. Permit No. 128933 Date Jan 6, 1987
12. Water from Limestone (Formation) at depth 265 to 590 ft.
13. County Whiteside
    Sec. 23.6L Twp. 21N Rge. 7E Elev. 700
14. Screen: Diam. ___ in. Length: ___ ft. Slot ___
15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
6	Wt steel	+1	274'1"

SHOW LOCATION IN SECTION PLAT
50' SL 50' WL
NW NE NW
[illegible] II

16. Size Hole below casing: 6 in.
17. Static level 100 ft. below casing top which is 1 ft. above ground level. Pumping level 205 ft. when pumping at 45 gpm for 5 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
top Soil and Clay	8	8
Gravel	16'	24'
Shale	11'	35'
Limestone	5'	40'
Shale	225'	265'
Lime Stone 225	~~325~~ 225	590'

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Jonas Martin DATE Feb 27, 1987

8

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO [illegible]ERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam.____In. Depth____ft.
   Curb material_____. Buried Slab: Yes_____No_____
   b. Driven_____. Drive Pipe Diam.____In. Depth____ft.
   c. Drilled X. Finished in Drift_____. In Rock X.
   Tubular_____. Gravel Packed_____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Bentonite		
Drillcuttings	0	212'

2. Distance to Nearest:
   Building 25 Ft. — Seepage Tile Field 100'+
   Cess Pool None — Sewer (non Cast Iron) 100'+
   Privy None — Sewer (Cast Iron) 357
   Septic Tank 100'+ — Barnyard None
   Leaching Pit None — Manure Pile None
3. Well furnishes water for human consumption? Yes X No____
4. Date well completed Jan. 2 1985
5. Permanent Pump Installed? Yes X Date Jan 5-85 No____
   Manufacturer Red Jacket Type Sub Location In Well
   Capacity 10 gpm. Depth of Setting 252' Ft.
6. Well Top Sealed? Yes X No____ Type Water Tight
7. Pitless Adapter Installed? Yes X No____
   Manufacturer Baker Model Number Snappy
   How attached to casing? Clamp
8. Well Disinfected? Yes X No____
9. Pump and Equipment Disinfected? Yes X No____
10. Pressure Tank Size 36 gal. Type pre pressure
    Location In Basement
11. Water Sample Submitted? Yes_____ No_____

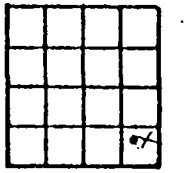
REMARKS: 20'-6" 20'-8" 21'-2" 17'-3" 17'-11" 17'-11" 19'-3 18'-4 18-0 18'-5 21-2 21'-10 213-5

Well Shot
Stopermite
Copermite
Clorine

IDPH 5
1/74 – KNB-1

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Family Tailored Homes Inc Well No.____
    Address 423 Locust Sterling Ill
    Driller Jonas Martin License No. 92332
11. Permit No. 116153 Date Dec 12-1984
12. Water from Limestone (Formation) 13. County Whiteside
    at depth 213 to 565 ft. Sec. 6.1 k
14. Screen: Diam.____In. Twp. 21N
    Length:____ft. Slot_____ Rge. 7E
    Elev. 725'



15. Casing and Liner Pipe Loch Hickory Hills

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
6"	WE Steel 19.45	+1½'	213'-5

SHOW LOCATION IN SECTION PLAT
Lot 4 Hickory Hollow 100'N 100'E Side NE SE SE

16. Size Hole below casing: 6 in.
17. Static level 156 ft. below casing top which is 1½ ft. above ground level. Pumping level 220 ft. when pumping at 10 gpm for 4 hours. Max Water 23 gal per Min. Dry

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Clay Fill	3	3'
Black Soil	2	5'
Clay	25'	30'
Sandy Clay	10	40'
Blue Shale	165'	205'
White Lime Stone	360	565'

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Jonas Martin DATE Jan 9-1985

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. ____ in. Depth ____ ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled X. Finished in Drift ____. In Rock X.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Drillcutting	0	47'

2. Distance to Nearest:
   Building 5 Ft. — Seepage Tile Field None
   Cess Pool None — Sewer (non Cast iron) "
   Privy " — Sewer (Cast iron) "
   Septic Tank " — Barnyard "
   Leaching Pit " — Manure Pile "
3. Well furnishes water for human consumption? Yes Yes No ____
4. Date well completed May 15-1987
5. Permanent Pump Installed? Yes ____ Date ____ No No
   Manufacturer ____ Type ____ Location ____
   Capacity ____ gpm. Depth of Setting ____ Ft.
6. Well Top Sealed? Yes Yes No ____ Type Compression
7. Pitless Adapter Installed? Yes ____ No ____
   Manufacturer ____ Model Number ____
   How attached to casing? ____
8. Well Disinfected? Yes Yes No ____
9. Pump and Equipment Disinfected? Yes ____ No ____
10. Pressure Tank Size ____ gal. Type ____
    Location ____
11. Water Sample Submitted? Yes ____ No ____

REMARKS: 21-4
21-4
6-0
48 8

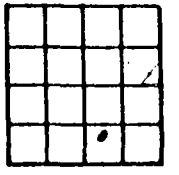
Wellshop Co # 21412
Stpermitt
Copermitt
Clorine

IDPH 4.065
1/74 – [illegible]B-1

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Butler Stone Quarry Dust Control

10. Property owner [illegible] Well No. ____
    Address ____
    Driller Jonas Martin License No. 92332
11. Permit No. 131604 Date May 12 1987
12. Water from Limestone (Formation) 13. County Whiteside
    at depth 125 to 530 ft.
14. Screen: Diam. ____ in.
    Length: ____ ft. Slot ____
    Sec. 13.1c
    Twp. 21N
    Rge. 6E
    Elev. 700'



SHOW LOCATION IN SECTION PLAT
100' NL 40' EL
SE SE NE
Commercial Spec.

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
6"	Wt Steel	0	48'-8"

16. Size Hole below casing: 6 in.
17. Static level 125 ft. below casing top which is 1 ft. above ground level. Pumping level 225 ft. when pumping at 40 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Clay	10	10
Yellow Limestone	50'	60'
Gray Limestone	30'	90'
Shale	210'	300'
Limestone Gray	225	525
Shale	5	530
Gray Limestone	45	575

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Jonas Martin DATE May 16

C

White & Pink Copies: Ill. Dept. of Public Health
Yellow Copy: Well Contractor
Golden Copy: Well Owner

Well Construction Report

THIS FORM MUST BE COMPLETED WITHIN 30 DAYS OF WELL COMPLETION AND SENT TO
THE ILLINOIS DEPARTMENT OF PUBLIC HEALTH
DIVISION OF ENVIRONMENTAL HEALTH
525 WEST JEFFERSON STREET
SPRINGFIELD, ILLINOIS 62761

1. Type of Well
   a. Bored_____ Hole Diam. 12 in. Depth 51½ ft
      Buried Slab: Yes___ No___
   b. Driven_____ Drive Pipe Diam.___in. Depth___ft
   c. Drilled X Finished in Drift X In Rock_____
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Well furnishes water for human consumption? Yes___ No X
3. Date well drilled April 14, 1989
4. Permanent pump installed? Yes ___ Date_____ No X
   Manufacturer_____ Type_____
   Location_____
   Capacity _____gpm. Depth of setting_____ft.
5. Well top sealed? Yes___ No___ Type welded to casing
6. Pitless adapter installed? Yes___ No X
   Manufacturer_____ Model No._____
   How attached to casing?_____
7. Well disinfected? Yes X No___
8. Pump and equipment disinfected Yes___ No___

IMPORTANT NOTICE
This State Agency is requesting disclosure of information that is necessary to accomplish the statutory purpose as outlined under Public Act 85-0863. Disclosure of this information is mandatory. This form has been approved by the Forms Management Center.

PRESS FIRMLY WITH BLACK PEN OR TYPE
Do Not Use Felt Pen

I' '32-0126

GEOLOGICAL AND WATER SURVEYS WELL RECORD

9. Driller_____ License No. 102-001203
10. Well Site Address_____
11. Property Owner Robert Eller Well No. 3153
12. Permit No. 139616 Date Issued 2/2/89
13. Location: County Whiteside
    Sec. 6./b
    Twp. 20N
    Rge. 7E
    Show location in section plat
    NE SE SE
14. Water from sand at depth 10 ft to 51½ ft
15. Casing and Liner Pipe

Diam.(in)	Kind and Weight	From (ft)	To (ft)
12	steel	+2½	31½

16. Screen: Diam. 12 in, Length 20' in, Slot Size .080
17. Size hole below casing 12 in. 18. Ground Elev._____ ft msl.
19. Static level 5 ft below casing top which is 2½ ft above ground level. Pumping level ___ft, pumping gpm 600-800 GPM for ___ hours.

20. Earth Materials Passed Through	Depth of Top	Depth of Bottom
Top SOil	4	4
Dirty Sand	6	10
12-25 Slot Sand = 1"	16	26
12-25 Slot Sand w/10% 25-1/8"	5½	31½
10 Slot to 1" w/3-6" Rocks	19	50½
Greenish Gray Clay	XXXXXXXX 1	51½

Continue on separate sheet if necessary.

Signed [signature] Date 4-26-89

D

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, BUREAU OF ENVIRONMENTAL HEALTH, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62701. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. 5 in. Depth 170 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled X. Finished in Drift ____. In Rock X.
   Tubular X. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
puddled	0	97

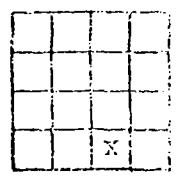
2. Distance to Nearest:
   Building 15 Ft. Seepage Tile Field 85
   Cess Pool ____ Sewer (non Cast iron) 60
   Privy ____ Sewer (Cast iron) 15
   Septic Tank 75 Barnyard 65
   Leaching Pit ____ Manure Pile ____
3. Is water from this well to be used for human consumption?
   Yes X No ____
4. Date well completed October 3, 1973
5. Permanent Pump Installed? Yes X No ____
   Manufacturer Red Jacket Type Submersible
   Capacity 1½ hp gpm. Depth of setting 70 ft.
6. Well Top Sealed? Yes ____ No ~~PAT 145 attached to casing~~
7. Pitless Adaptor Installed? Yes X No ~~Cyclamp~~
8. Well Disinfected? Yes X No ____
9. Water Sample Submitted? Yes ____ No X

REMARKS: 145gal PAT gassine tank buried

IDPH 4 065
10-72
KNB-1

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner [illegible] Well No. ____
    Address ____
    Driller S. Dean Albrakh License No. 102-120
11. Permit No. 25943 Date October 11, 1973
12. Water from Limerock (Formation)
    at depth 97 to 170 ft.
13. County Whiteside
    Sec. 2
    Twp. 20N
    Rge. 6E
    Elev. ____
14. Screen: Diam. ____ in.
    Length: ____ ft. Slot ____



15. Casing and Liner Pipe

Diam (in.)	Kind and Weight	From (Ft.)	To (Ft.)
5	black	0	97

SHOW LOCATION IN SECTION PLAT
60'S 40'W of NE/4 SE SW SE

16. Size Hole below casing: 5 in.
17. Static level 6 ft. below casing top which is 1¼ ft. above ground level. Pumping level 19 ft. when pumping at 30 gpm for 2 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
clay	0	10
gravel	49	59
clay	27	86
sand & gravel	11	97
limerock	73	170

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [signature] DATE Nov 5, 1973
C.H.

Appendix G

Henry Hoffman Landfill

Technical Assistance Team Report

SITE ASSESSMENT REPORT
FOR
HOFFMAN LANDFILL
ROCKFALLS, WHITESIDE COUNTY, ILLINOIS
TDD: T05-9308-023
PAN: EIL0809SAA

ecology and environment, inc.
International Specialists in the Environment

SITE ASSESSMENT REPORT
FOR
HOFFMAN LANDFILL
ROCKFALLS, WHITESIDE COUNTY, ILLINOIS
TDD: T05-9308-023
PAN: EIL0809SAA

NOVEMBER 15, 1993

Prepared by: Raghavender Rao Nagam Date: 11/15/1993

Reviewed by: John Sherman Date: 11-15-93

Approved by: [signature] Date: 11/15/93

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF APPENDICES

1.0 INTRODUCTION:

The Ecology and Environment, Inc. (E & E) Technical Assistance Team (TAT) was tasked by the Emergency and Enforcement Response Branch (EERB) of the United States Environmental Protection Agency (U.S. EPA) on August 24, 1993, under Technical Direction Document T05-9308-023 to conduct a site assessment (SA) of Hoffman Landfill (HL) site and evaluate threats to human health and environment.

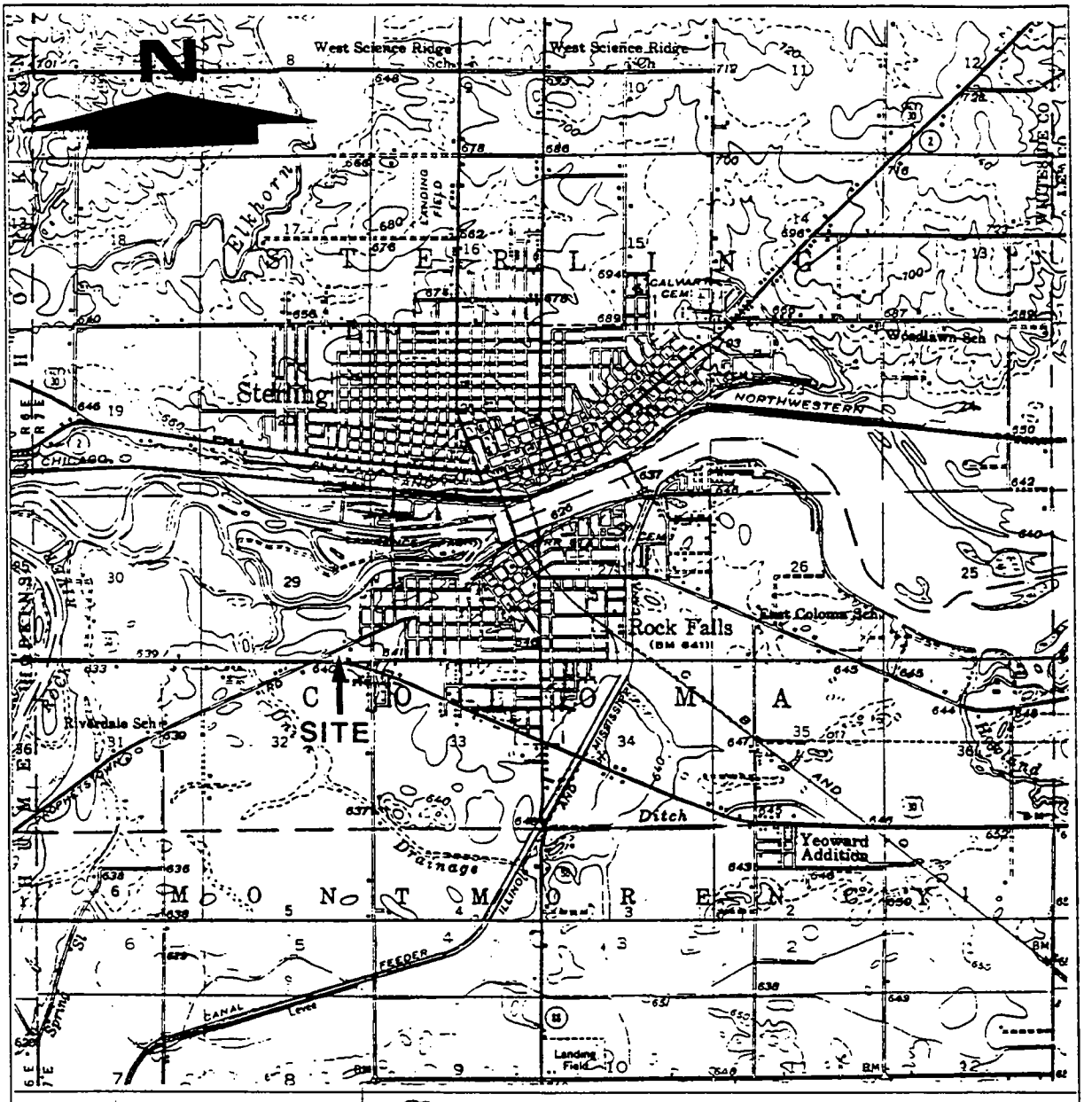
The HL site is located in Rock Falls, Whiteside County, Illinois and is legally described as within 1/4 SE of 1/4 SW of 1/4 SE of Section 29, T.21 N, R 7E (Figure 1 - Site Location Map).

2.0 SITE BACKGROUND:

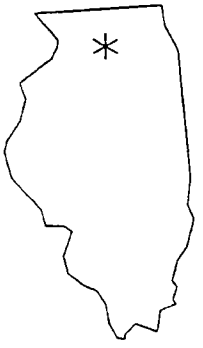
The site was referred to U.S. EPA by the ARCS subcontractor, who at the time of reporting, was conducting monitoring well sampling of Hoffman Landfill. The ARCS subcontractor noticed the tanks and drums near Advanced Asphalt Company located adjacent to the landfill and determined them to be in a position to pose an environmental threat.

3.0 SITE ACTIVITIES:

TAT members R. Nagam, J. Sherrard, and Y. Anderson conducted the site assessment (SA) along with On-Scene Coordinator (OSC) Paul Steadman on August 25, 1993 . Henry Hoffman, the property owner of Hoffman Landfill was present on the site, and showed the location of drums and tanks near the eastern border of Hoffman Landfill. This location, which is an open area east of HL area is currently leased to Advanced Asphalt Company (AAC) by Henry Hoffman. AAC is an active facility dealing with the manufacture of Asphalt. Hoffman, upon OSCs request, had given the name of Bradley Bruins, as the contact person for AAC and also volunteered to inform Bruins of U.S. EPA's ongoing site assessment. After calibrating photo ionization detector (PID) and oxygen/explosimeter, the TAT and OSC started site reconnaissance. AAC is bordered on the north and west by Hoffman Landfill, on the south by a pond and agricultural land, and on the east by a dirt road leading to Anixter Road. Hoffman's property, which includes the landfill and AAC area, is fenced and access controlled by a gate on Anixter Road. During this site assessment, Bradley Bruins, Superintendent of AAC came and spoke with OSC Paul Steadman. Several 55-gallon metal drums were observed on AAC leased property. Most of these drums were either empty or contained material in small quantities. A total of seven (7) horizontal and two (2) vertical tanks were observed in this area. All the seven (7) horizontal tanks appeared to be non-operational and in a moderate to poor condition. The tank on



Quadrangle Locations



ecology and environment, inc.
Technical Assistance Team
Region V
111 W. Jackson Blvd., Chicago, Illinois 60604

TITLE: Site Location Map		FIGURE #: 1
SITE: Hoffman Landfill		SCALE: 1:62,500
CITY: Rock Falls	STATE: IL	PAN: EIL0809SAA
SOURCE: U.S.G.S. Sterling and Walnut Topographic Quadrangles		DATE: 1947 & 1949
		REVISED: N/A

the northwest side of AAC (Tank#1) contained black asphalt-like material at its bottom. During this SA, TAT labelled all the twenty one (21) drums found on the location. Seven (7) of these drums contained small quantities of material while the rest of the fourteen (14) drums were observed to be empty. One of the seven drums had a label of hydraulic oil, while a second drum had a label of diesel oil. Bruins, per OSCs request, had agreed to reclaim these two drums. Bruins indicated that the two vertical tanks (mentioned previously) belonged to AAC. He had also informed the OSC that the horizontal tanks at this location were present from last 20 years. In close proximity to the two vertical tanks, twelve (12) black, 55-gallon metal drums and three (3) 30-gallon metal drums were present (Figure 2 - Site Features Map). These were identified by Bruins as belonging to AAC and provided the OSC with material safety data sheets (MSDS) of the drum contents. The MSDS information indicated that the drum material contained trichloroethane, perchloroethylene, and other solvents. PID reading on Tank#1 indicated 18 parts per million (ppm) of organic atmosphere. Another horizontal tank appeared empty but indicated a PID reading of 5 ppm.

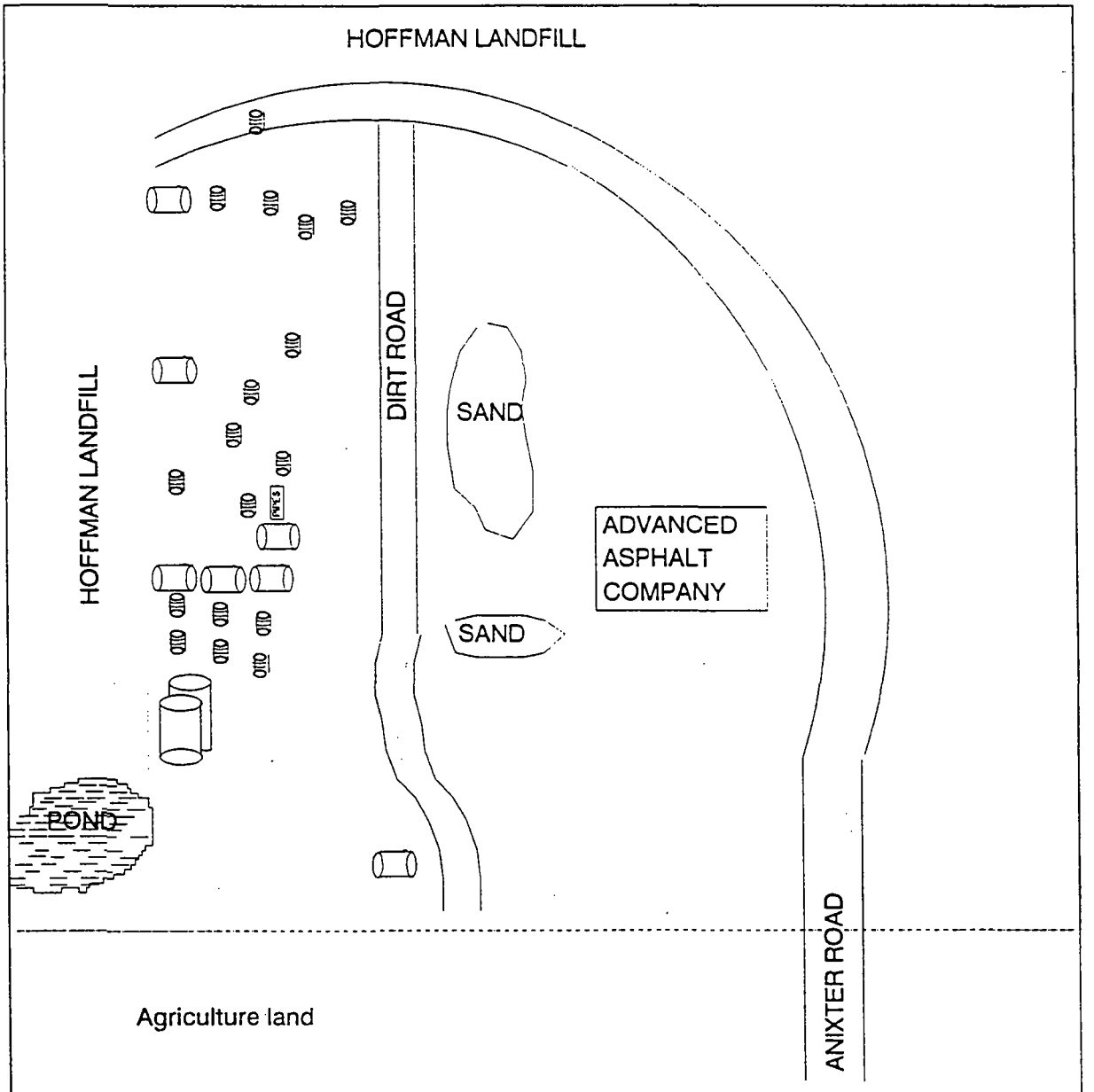
After this site reconnaissance, TAT made preparations for sampling the drums. Most of the seven drums identified earlier appeared to contain small quantities of rain water mixed with oily material. Due to the nature of the drum contents and their volume, no samples were taken during this SA. Tank#1 sample could not be collected because of the small amount of material at its bottom.

Based on drum and tank locations, and the similarity of drum and tank contents to AACs raw materials and product, OSC had requested Bruins to take actions to abate threats posed by the deteriorating tank and drums within ten (10) days. Bruins had indicated that they will empty Tank#1 and the seven drums and send them to a fuels blender.

During this SA, TAT photographed the features of the site, which are included in Appendix A. All potentially contaminated equipment was bagged and taken with TAT for proper disposal. No samples were collected during this site assessment. After these site activities, TAT demobilized from the site.

4.0 DISCUSSION OF POTENTIAL THREATS:

MSDS for the tar binder indicates that it contains hazardous chemicals like trichloroethane, perchloroethylene, and other solvents. Tanks and drums containing tar binder and other material stored in an improper manner posed a potential threat to public health and the environment if such materials



LEGEND

N

Drum

Horizontal tank

Vertical tank

Landfill boundary

Property fence

ecology and environment, inc.
Technical Assistance Team
Region V
111 W. Jackson Blvd., Chicago, Illinois 60604

TITLE: Site Features Map		FIGURE #: 2
SITE: Hoffman Landfill		SCALE: Not to scale
CITY: Rock Falls	STATE: IL	PAN: EIL0809SAA
		DATE: 1993

were released to the ground and the environment.

4.1 THREAT TO HUMAN HEALTH AND ENVIRONMENT:

Conditions at Hoffman Landfill site that warranted an appropriate action as set forth in paragraph (b) (2) of section 300.415 of the National Contingency Plan (NCP) are:

(i) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants:

Drums containing trichloroethane, perchloroethylene, and other hazardous solvents were stored improperly and in a manner that posed exposure threats to people working on the site.

(ii) Weather conditions that may cause hazardous substances to migrate or be released.

Some of the drums and tanks were in poor and deteriorating condition. These tanks and drums which were stored outside without any protection from inclement weather posed potential migration threats under severe weather conditions.

5.0 U.S. EPA ACTION

Paragraph (a) (2) of section 300.415 of the National Contingency Plan (NCP) as applicable to Hoffman Landfill is:

"Where the responsible parties are known, an effort initially shall be made, to the extent practicable, to determine whether they can and will perform the necessary removal action promptly and properly"

Based on drum and tank locations, and the similarity of drum and tank contents to AACs raw materials and product, OSC had verbally notified Bruins during the SA to abate threats posed by the deteriorating tank and drums within ten (10) days. Bruins had indicated that they will empty Tank#1 and the seven drums and send them to a fuels blender.

On August 27, 1993, OSC Steadman mailed letters to Bradley Bruins, Superintendent of AAC, and Henry Hoffman, property lessor to AAC, reiterating their agreement during the SA, to take appropriate steps within ten (10) days to ensure that the waste materials are removed from the site and properly disposed of (Appendix B). OSC in this letter had also suggested that the twelve (12) black 55-gallon "tar binder" drums of AAC be moved to a location where they will not create a serious hazard to the environment.

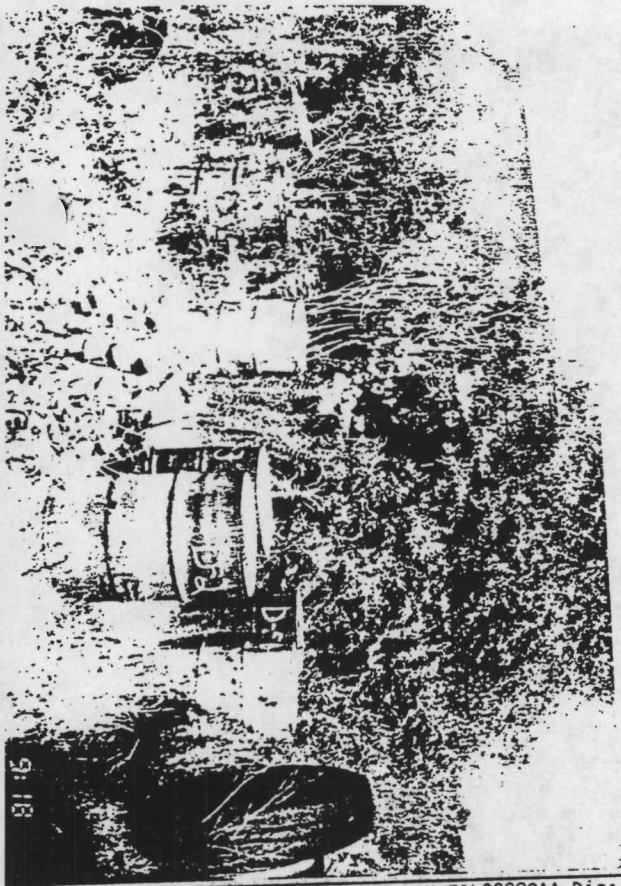
On September 30, 1993, OSC Steadman received a fax of the Safety Kleen's receipt sent by Bruins. This receipt indicated the pick-up of 1,000 gallons of used oil from AAC by Safety Kleen Corporation.

On October 19, 1993 OSC Steadman received a letter from Bruins of Advanced Asphalt Company, and three (3) photographs of the site's current conditions. The letter itemizes and attests to efforts made by the potential responsible party (PRP) to improve the sites appearance and conditions.

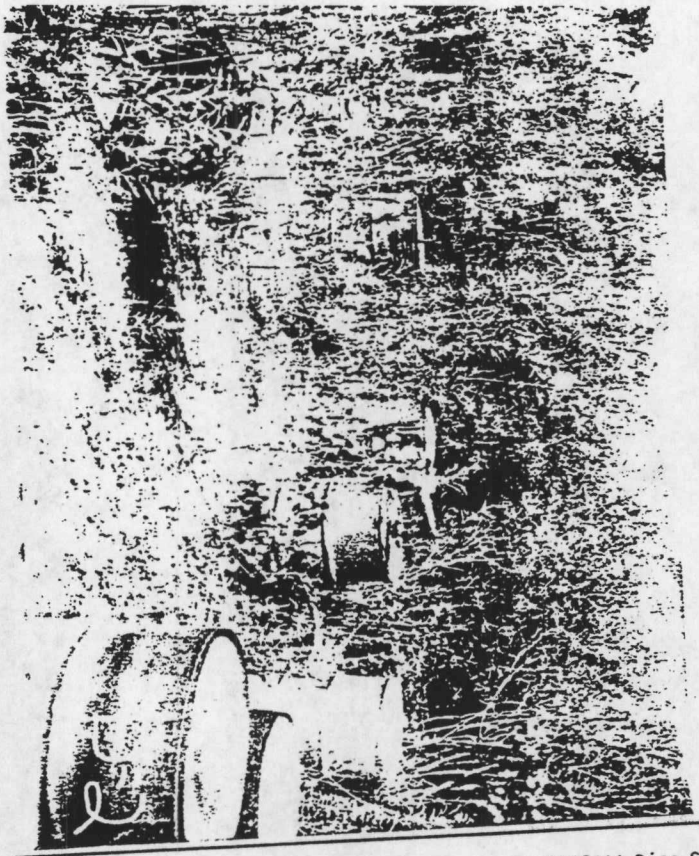
6.0 RECOMMENDATIONS:

Actions taken by Advanced Asphalt Company, pursuant to OSC Steadman's suggestion, have effectively mitigated potential threats due to hazardous chemicals present in drums and tanks.

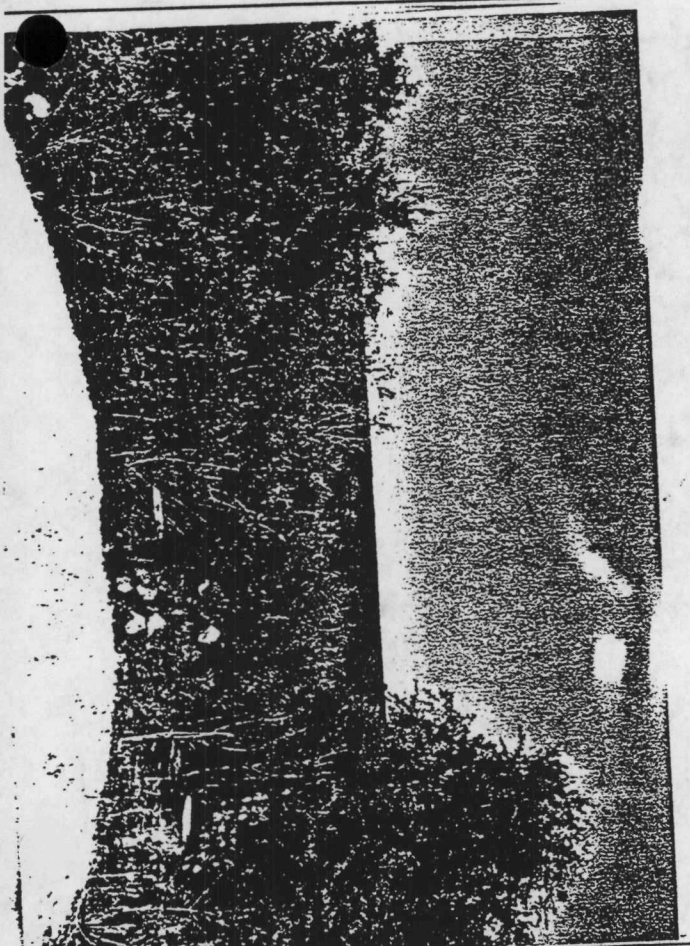
APPENDIX A PHOTO DOCUMENTATION



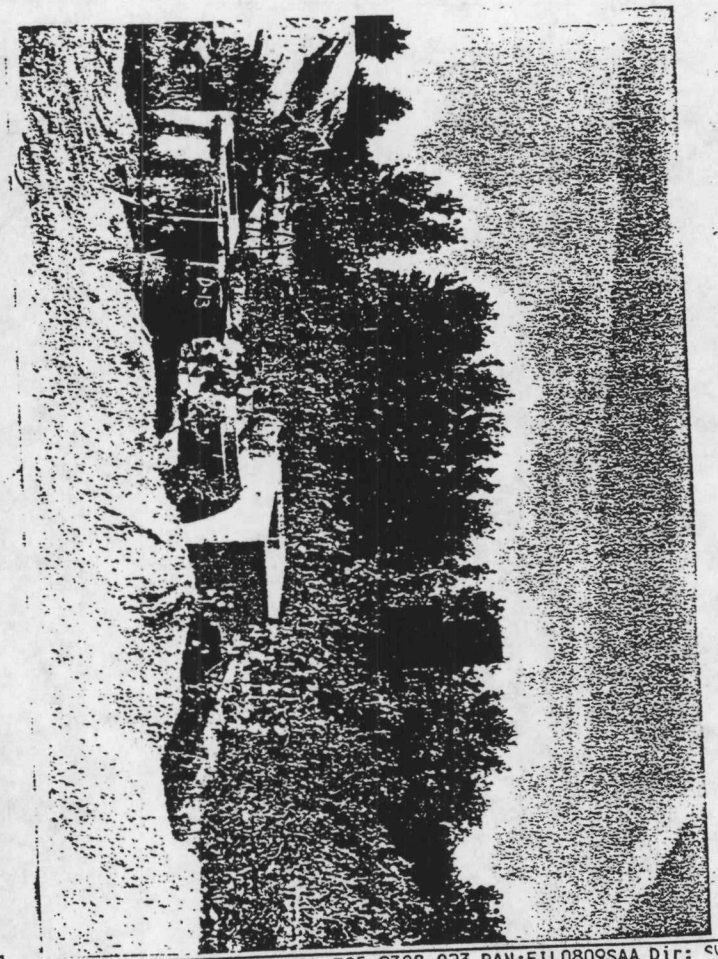
:Hoffman Landfill TDD:T05-9308-023 PAN:EIL0809SAA Dir: W
:8/25/93 Time:0918 Weather:Cloudy, 70°F Photo by:J.Sherrard
ments: View of several 55-gallon metal drums found adjacent
Hoffman Landfill near Advanced Asphalt Company



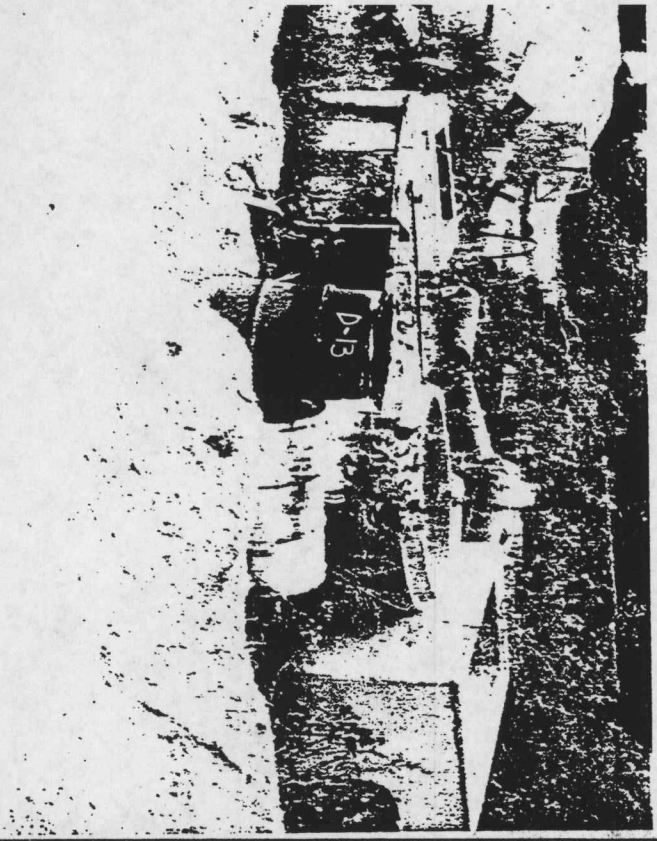
Site: Hoffman Landfill TDD:T05-9308-023 PAN:EIL0809SAA Dir: SW
Date:8/25/93 Time:0919 Weather:Cloudy, 70°F Photo by:J.Sherrard
Comments: View of 55-gallon drums and the metal tank T-1



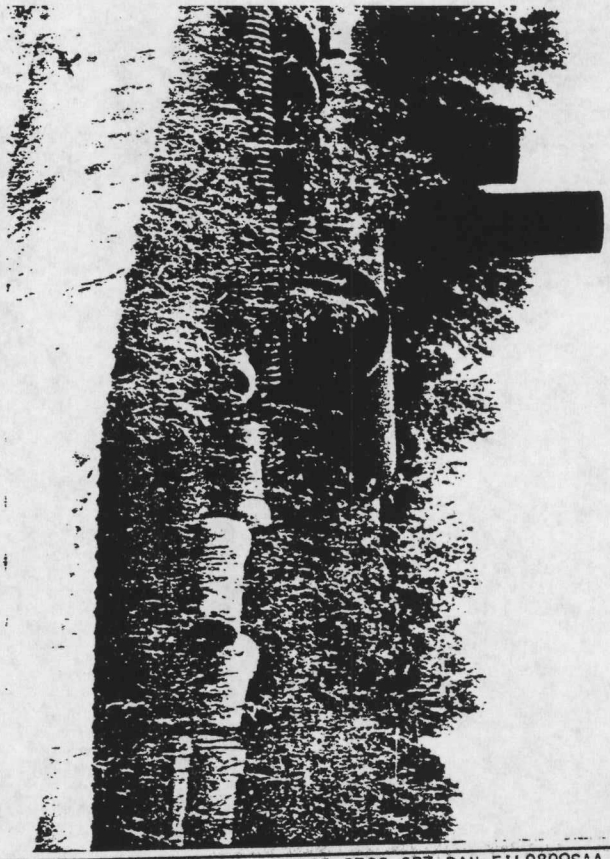
Site:Hoffman Landfill TDD:T05-9308-023 PAN:EIL0809SAA Dir: W
Date:8/25/93 Time:0920 Weather:Cloudy, 70°F Photo by:J.Sherrard
Comments: Photo of tank T-1 surrounded by bushes. Tank T-1 had
small volume of black tar like material.



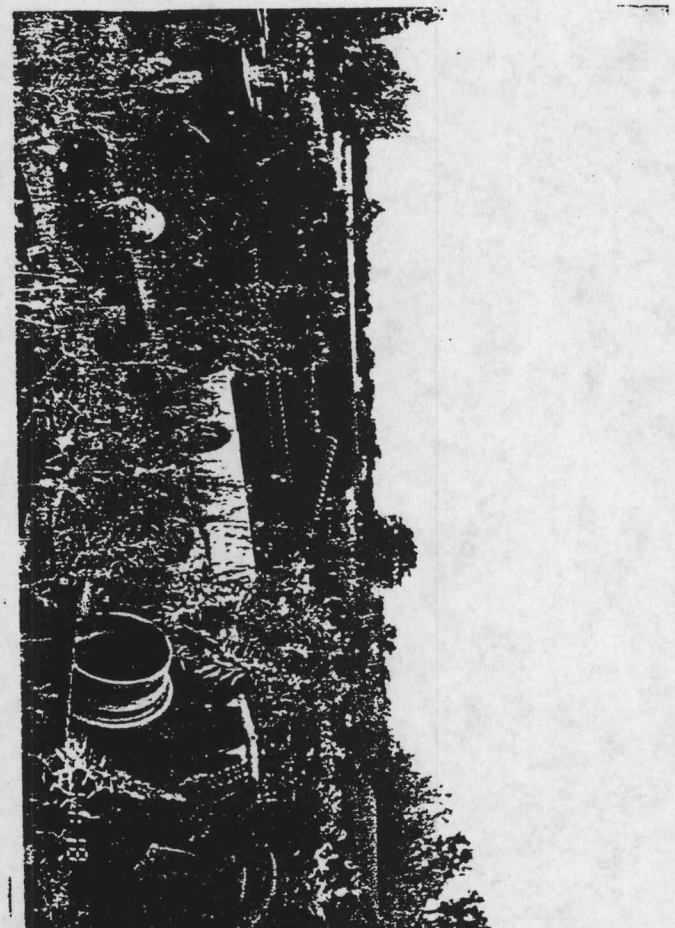
Site: Hoffman Landfill TDD:T05-9308-023 PAN:EIL0809SAA Dir: SW
Date:8/25/93 Time:0922 Weather:Cloudy, 70°F Photo by:J.Sherrard
Comments: View of two vertical metal tanks that are used by
Advanced Asphalt Company for the manufacture of Asphalt



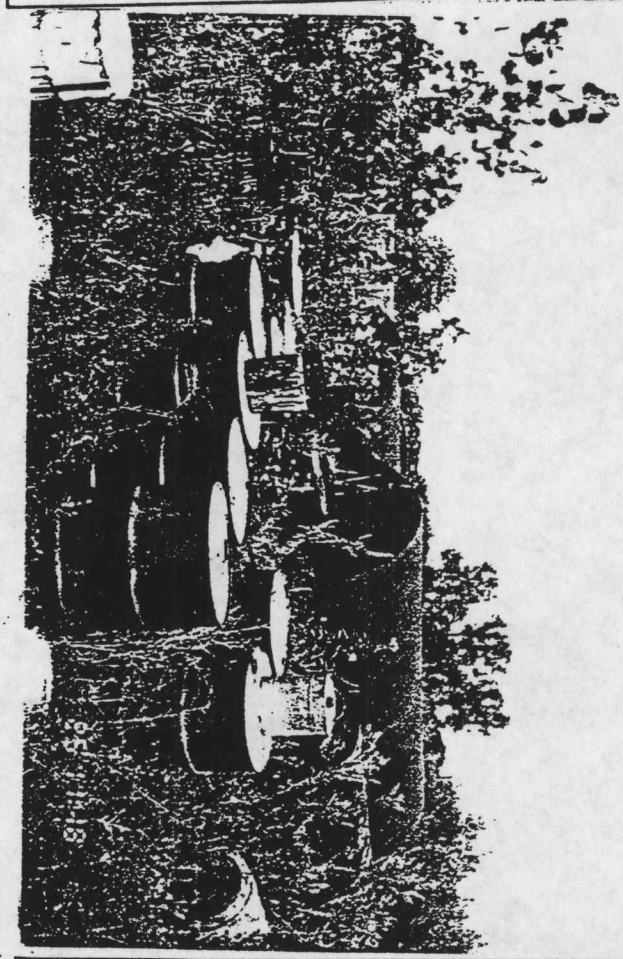
Site:Hoffman Landfill TDD:T05-9308-023 PAN:EIL0809SAA Dir: S
Date:8/25/93 Time:1117 Weather:Cloudy, 70°F Photo by:J.Sherrard
Comments: View of some empty 55-gallon drums located near Advanced Asphalt Company.



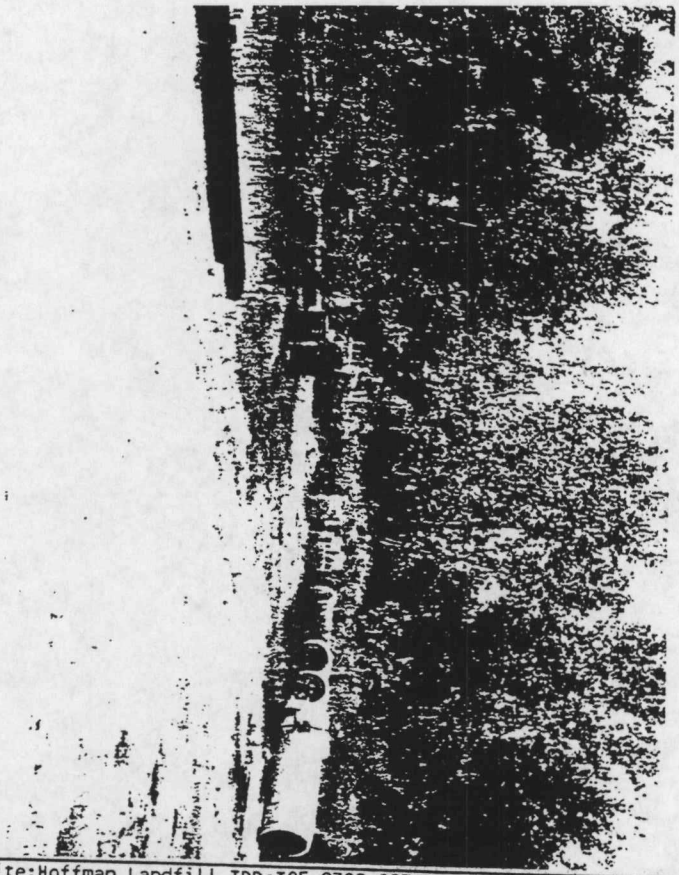
Site: Hoffman Landfill TDD:T05-9308-023 PAN:EIL0809SAA Dir: S
Date:8/25/93 Time:1117 Weather:Cloudy, 70°F Photo by:J.Sherrard
Comments: Photo of empty horizontal tanks and several pipes located near the two vertical tanks of Advanced Asphalt Co.



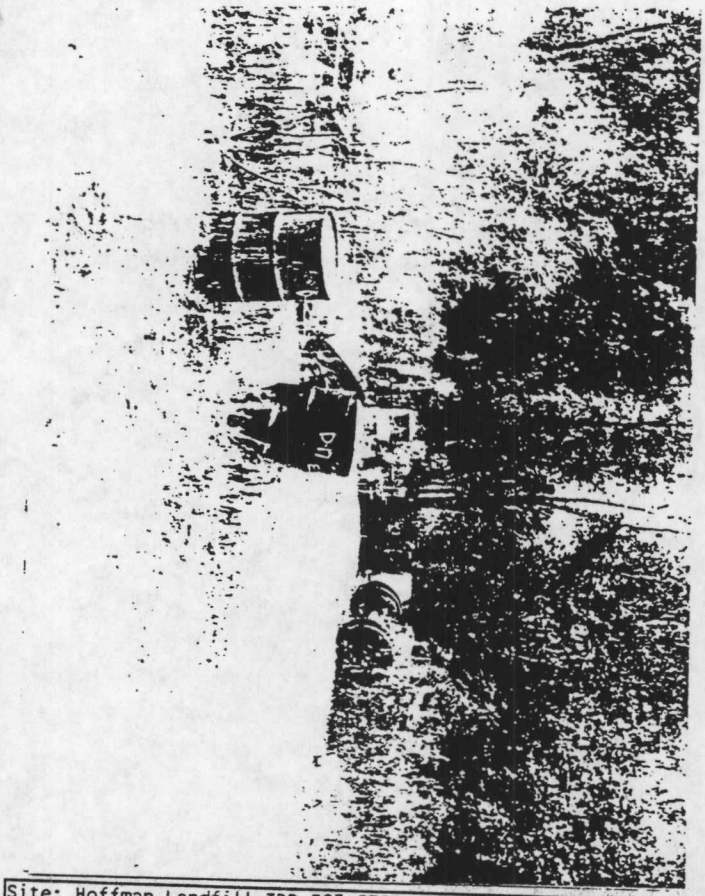
Site:Hoffman Landfill TDD:T05-9308-023 PAN:EIL0809SAA Dir: W
Date:8/25/93 Time:1118 Weather:Cloudy, 70°F Photo by:J.Sherrard
Comments: A closer view of four (4) horizontal tanks, several pipes, and tires located on the east side of Hoffman Landfill.



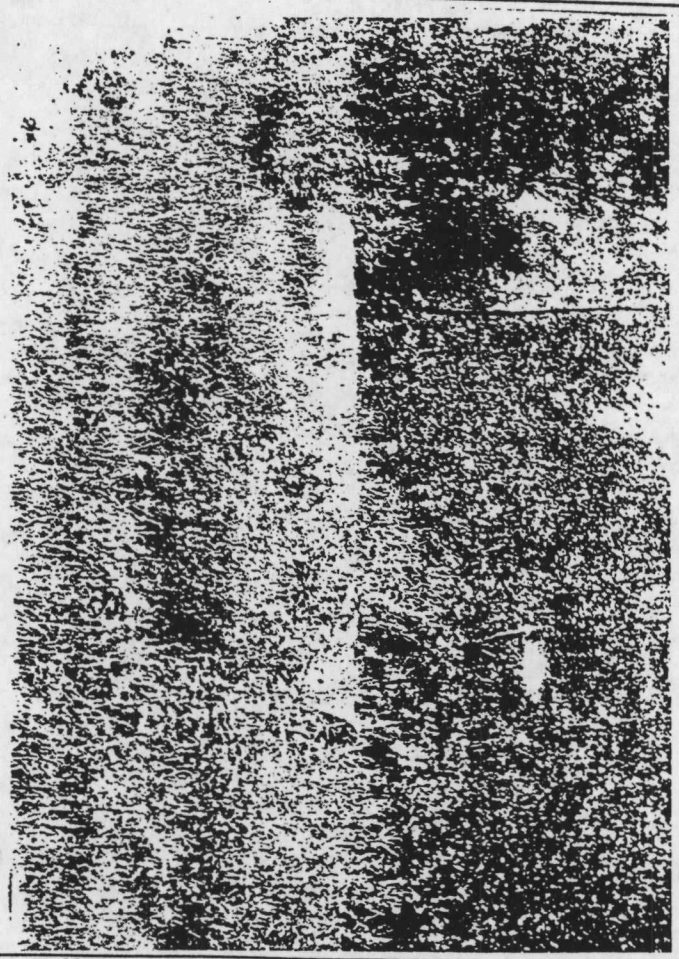
Site: Hoffman Landfill TDD:T05-9308-023 PAN:EIL0809SAA Dir: W
Date:8/25/93 Time:1118 Weather:Cloudy, 70°F Photo by:J.Sherrard
Comments: Photo showing twelve (12) black 55-gallon metal drums that appeared to have asphalt in them.



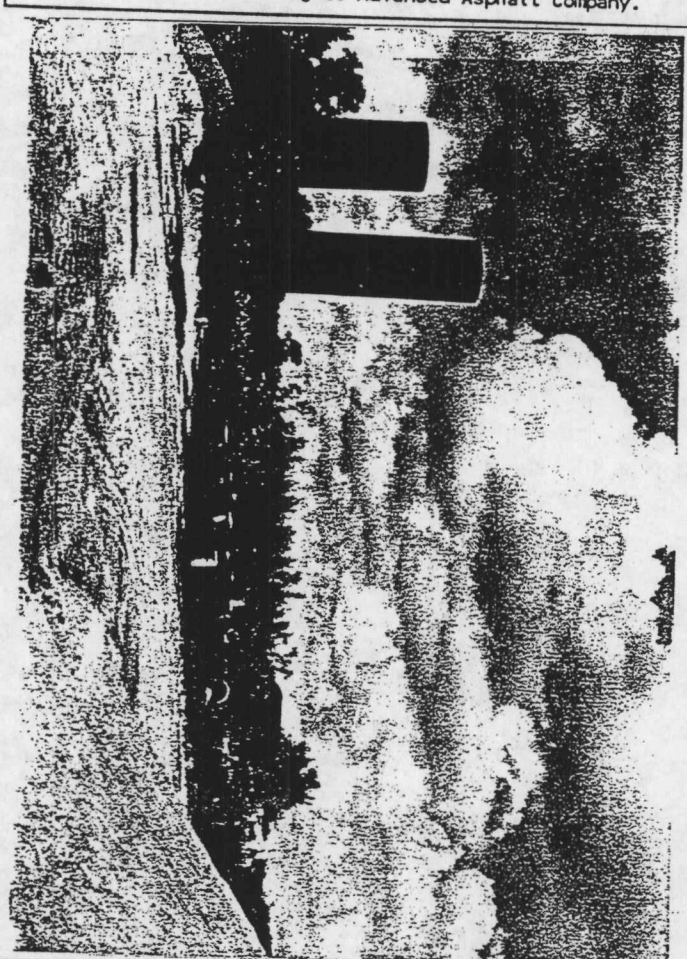
Site:Hoffman Landfill TDD:T05-9308-023 PAN:EIL0809SAA Dir: S
Date:8/25/93 Time:1118 Weather:Cloudy, 70°F Photo by:J.Sherrard
Comments: Photo of some more empty 55-gallon drums located south of vertical tanks.



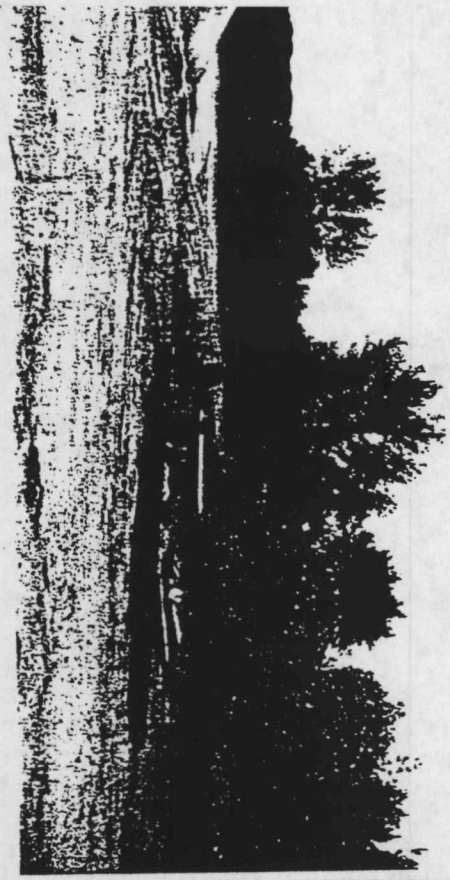
Site: Hoffman Landfill TDD:T05-9308-023 PAN:EIL0809SAA Dir: S
Date:8/25/93 Time:1119 Weather:Cloudy, 70°F Photo by:J.Sherrard
Comments: View of two orange/yellow metal 55-gallon drums labelled RC-70, that belong to Advanced Asphalt Company.



Site:Hoffman Landfill TDD:T05-9308-023 PAN:EIL0809SAA Dir: SE
Date:8/25/93 Time:1119 Weather:Cloudy, 70°F Photo by:J.Sherrard
Comments: Photo of an empty horizontal tank located in the bushes of Advanced Asphalt Company.

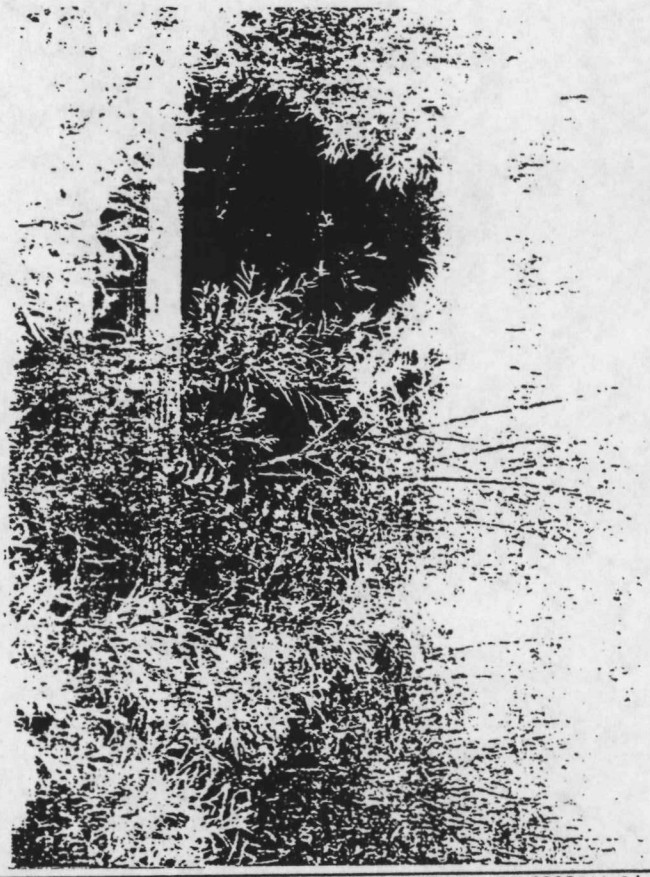


Site: Hoffman Landfill TDD:T05-9308-023 PAN:EIL0809SAA Dir:
Date:8/25/93 Time:1119 Weather:Cloudy, 70°F Photo by:J.Sherrard
Comments: A perspective of tanks and drums located outside the eastern boundary of Hoffman Landfill.



Site:Hoffman Landfill TDD:T05-9308-023 PAN:EIL0809SAA Dir: S
Date:8/25/93 Time:1119 Weather:Cloudy, 70°F Photo by:J.Sherrard
Comments: Sand other material located on Advanced Asphalt Company premises, that is used for asphalt manufacture.

(12)



Site: Hoffman Landfill TDD:T05-9308-023 PAN:EIL0809SAA Dir: E
Date:8/25/93 Time:1120 Weather:Cloudy, 70°F Photo by:J.Sherrard
Comments: View of an horizontal tank located in the bushes of Advanced Asphalt Company premises.

(11)

APPENDIX B U.S. EPA LETTER TO PRP's

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

AUG 27 1993

REPLY TO THE ATTENTION OF

HSE-5J

Mr. Brad Bruns, Superintendent
Advanced Asphalt Company
P.O. Box 234
Princeton, Illinois 61356

AND

Mr. Henry Hoffman, Property Lessor
709 Hoffman Drive
Rock Falls, Illinois 61701

Dear Mr. Bruns and Mr. Hoffman:

RE: Disposition of Potentially Hazardous Waste Materials Stored at the Henry Hoffman Landfill/Associated Asphalt Company Property in Rock Falls, Whiteside County, Illinois

CERCLIS Site ID No.

During the conduct of this Agency's removal site assessment of the referenced property off Anixter Road in Rock Falls (legally described as within the SE 1/4 of Section 29, T21N, R78E) on Wednesday, August 25, 1993, it was determined that an accumulation of potentially hazardous substances containing trichloroethane, perchloroethylene and other solvents have been improperly stored on this site. Such improper storage can result in an imminent threat to the public health and the environment if such materials are released to the ground and surrounding area.

I met with both of you during this assessment and it was agreed that you would take appropriate steps within ten (10) days to ensure that these waste materials are removed from the site and properly disposed.

This refers especially to the contents of the tank marked as T-1, and the drums marked D-1, D-4, D-5, D-6, D-7, D-10 and D-11. As well, the off spec material referred to as "tar binder" in the 12 55-gallon capacity drums would be moved to a location where they will not create a serious hazard to the environment from a potential release or be confused with hazardous waste materials.

When the above steps have been taken, please notify this Agency <u>in writing</u> at the above address identifying the disposal facility (fuel recycler or fuel blender ?), the waste materials that were taken and the location.

We appreciate your cooperation in this matter. If you have any questions, please call me at telephone number 312/353-7615.

Sincerely,

Paul R. Steadman,
On-Scene Coordinator
Emergency and Enforcement Response Branch

cc: Office of Regional Counsel - EPA Reg. V
R.C. Karl, EERB Chief, Reg. V
M.E. Gustafson, Response Section III Chief
A. Altur, Illinois Site Assessments Section

APPENDIX C DISPOSAL LETTER FAX

Box 234

PH: (815) 872-9911

ADVANCED ASPHALT CO.
PRINCETON, ILL. 61356

August 30, 1993

U.S. Environmental Protection Agency
Region V, Emergency Response Branch
77 W. Jackson Blvd. HSE-5J
Chicago, Illinois 60604

ATTENTION: Mr. Paul R. Steadman, M.P.H.

Dear Paul,

You will find enclosed a copy of the receipt from Safety-Kleen Corp. for used oil picked up at our Rock Falls, Illinois asphalt plant facility.

Once again, I would like to thank you for your help in this matter.

Very truly yours,

ADVANCED ASPHALT CO.

Brad Bruins

Bradley J. Bruins

BJB:lf

encl.

...ty-Kleen Corp.

PLACEMENT FORM

FED. I.D. NO. 39 - 6090019

ELGIN, ILLINOIS 60123

A 17798

GENERATOR/LOCATION

...ANCED ASPHALT
...AND ...ER RT 30
...CK FALLS IL
... 815 626 0336

BILL TO (IF DIFFERENT FROM LOCATION)

NAME
INFORMATION / ATTENTION LINE
DELIVERY ADDRESS
CITY STATE
ZIP TAX CODE

MANIFEST NUMBER

SERVICE SIGN-UP

...SMAN'S NO.	BUSINESS TYPE	TANK CAPACITY	TERRITORY	CUSTOMER TELEPHONE NO.	SALES TAX EXEMPTION NO.	CUSTOMER P.O. NUMBER
225	90	1000	01	815-626-0336	—	

SVC P/S	FOOD P/S	HANDLING CODE	CREDIT CODE	NEXT SVC	SERVICE TERM	BRANCH NO.	COMMENTS
—	—	—	—	UNSCHED		504771	—

SERVICE SECTION

DESCRIPTION	GROSS QUANTITY	NET QUANTITY	UNIT OF MEASURE	PRICE	SERVICE CHARGE	TAX	LINE TOTAL
...D OIL PICK UP	1000		G	84.50	—	—	84.50
...W... DISPOSAL							
...RCEPTOR SERVICE							
...URRAGE							
...PING TIME							
...AGE							
...C ... Chg	1		EA	20.00	—	—	20.00
TOTAL							104.50

...T RECEIVED SECTION

TOTAL RECEIVED

...NT MADE SECTION

PAYMENT AMOUNT

...ECK

RECEIVED BY

...MER'S SIGNATURE

I certify that my hazardous waste streams total less than 220 pounds (100 kg) for this calendar month and that I am not required to obtain an EPA identification number.

GENERATOR'S INITIALS

CHARGE MY ACCOUNT FOR THIS TRANSACTION UNLESS OTHERWISE INDICATED IN THE PAYMENT RECEIVED SECTION. $ 104.50

INVOICES REFLECTING CHARGES TO CUSTOMER ARE SUBJECT TO AN INTEREST RATE OF THE LESSER OF 1½% PER MONTH (18% PER ANNUM) OR THE MAXIMUM RATE ALLOWED BY LAW ON ANY INVOICES THAT ARE NOT PAID WITHIN 30 DAYS. IN THE EVENT OF DEFAULT, SAFETY-KLEEN SHALL BE ENTITLED TO RECOVER COSTS OF COLLECTION, INCLUDING REASONABLE ATTORNEY'S FEES.

GENERATOR WARRANTS AND REPRESENTS THAT THE MATERIALS PROVIDED SAFETY-KLEEN CORP. HEREUNDER HAVE NOT BEEN MIXED, COMBINED, OR OTHERWISE BLENDED IN ANY QUANTITY WITH MATERIALS CONTAINING POLYCHLORINATED BIPHENYLS (PCB) OR ANY OTHER MATERIAL DEFINED AS A HAZARDOUS WASTE UNDER APPLICABLE LAWS, INCLUDING BUT NOT LIMITED TO 40 CFR PART 261. GENERATOR AGREES TO INDEMNIFY AND HOLD SAFETY-KLEEN CORP. HARMLESS FOR ANY DAMAGES, COSTS, ATTORNEY'S FEES, ETC. ARISING OUT OF OR IN ANY WAY RELATED TO A BREACH OF THE ABOVE WARRANTY BY THE GENERATOR.

APPENDIX D PRP'S LETTER OF CORRECTIVE ACTIONS

Box 234

PH: (815) 872-9911

ADVANCED ASPHALT CO.
PRINCETON, ILL. 61356

October 19, 1993

U.S. Environmental Protection Agency
Region V, Emergency Response Branch
77 W. Jackson Blvd. HSE-5J
Chicago, Illinois 60604

ATTENTION: Mr. Paul R. Steadman, M.P.H.

Dear Paul,

Since your visit to our plant site in late August, we have taken the following precautions as per your advice.

1. All tanks and drums which contained fuel oil were pumped out by Safety Kleen Corp. of Elgin, Illinois.

2. All tanks and drums with the exception of one tank have been removed from our property and sold as scrap.

3. The drums containing an asphalt anti-strip additive have been grouped together and covered with a tarp. (See enclosed pictures.)

Should you need any further information, please contact me.

Very truly yours,

ADVANCED ASPHALT CO.

Brad Bruins

Bradley J. Bruins

BJB:lf